

THE

Barteldes
NATIONAL AGRICULTURAL
SEED COMPANY

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Lawrence, Kansas

U. S. DEPARTMENT OF AGRICULTURE

Our
96th year
1963

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CURRENT SERIAL RECORDS



Flower and Vegetable Seeds
for a beautiful and productive garden



Annual Flowers Are Easy To Grow, Add Color and Beauty To Your Lawn and Cut Flowers For Your Table. If your Dealer Does Not Have These Varieties He Will Be Glad To Order Them For You.



ANNUAL BORDER

SNAPDRAGON, PANORAMA

A new hybrid strain which is finest for home gardens, bedding and summer cut flowers. The plants are about 36 inches tall, are vigorous and stand our Middle West conditions. Colors range through rich crimson, rose-pink, yellow, white and lavender shades. Each plant has from 6 to 10 flower spikes. Pkt. 35c.

ZINNIA, MISS UNIVERSE

The largest and loviest of all Zinnias. Gigantic flowers in brilliant colors. Grows 2 to 2½ feet tall. Pkt. 35c.

SWEET WILLIAM, WEE WILLIE

A new dwarf annual Sweet William. Bright colors and wonderful for borders. Pkt. 35c.

COSMOS, MANDARIN

A new brilliant orange, strongly double Cosmos. Flowers frequently have 40 petals but even more impressive is the heavy, dense foliage. The plants make a luxuriant garden specimen even after they have been in bloom for some time. Pkt. 35c.



MARIGOLD, PETITE. All-America Winner. A distinct new type of dwarf Marigold. Grows about 6 inches tall and bears an abundance of all-double flowers in Marigold colors. Uniform in growth and a fine edger. Very colorful. Pkt. 35c.

ZINNIA, MISS UNIVERSE



**SNAPDRAGON
PANORAMA**



SWEET WILLIAM, WEE WILLIE



COSMOS, MANDARIN



SINCE 1867

That goes back a long, long ways. Ninety-six years, in fact.

If you are one of many who now have more leisure time than formerly or if you need to save money on your grocery bills you should by all means plant a good sized garden.

It is a healthy, relaxing and rewarding hobby in which the whole family can participate.

This book is written to help you select the seeds you wish to plant and then to inform you as to how to care for them.

Keep this book. You will want to refer to it frequently during the year. Take note of the new varieties of flowers. They are really worth planting.

And many of you will want to plant according to the Zodiac Signs and the Phases of the Moon. You will find these on page 15.

The Barteldes Seed Dealer in your home town carries stocks of seeds, insecticides, fertilizers, weed killers, etc., for your convenience.

Call on him. He is your friend and neighbor.

ASPARAGUS

Asparagus does well in any well drained soil, and a good bed will last twenty years. It can be started either from seed or by setting out the plants, but for the home gardener we suggest setting out plants and saving a year in time.

When set in beds, the asparagus plants should be set at least 1½ feet apart each way; when set in rows they should be about 18 inches apart with rows from 4 to 5 feet apart. Cut sparingly the first year, and fertilize liberally once a year.

Martha Washington, a fine variety, nice green color and rust resistant.

All Garden Plans Should Lead Off With BEANS

Beans are rightly the favorite vegetables of most home gardeners. They are extremely easy to grow, offer a variety of kinds and can be used in many ways.

In beans you have a choice of green or wax snap beans in bush types or heavy yielding pole types; limas in bush and pole types; and also shell beans for winter.

Important

The maturity periods listed after the names should be classified as follows: In the Wax and Green Pod classes the figures indicate the number of days required to produce snap pods. In the Lima class the number of days required to produce green shell beans.

*Designates Varieties Recommended for "Quick Freezing."

Never cultivate or work in beans when they are wet.

The Barteldes Seed Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container, within recognized tolerances. Seller gives no other or further warranty, express or implied.

Bush Green Pod and Wax Beans

Cultivate the soil thoroughly. Rows for hand cultivation should be 1½ to 2 feet apart and for horse and tractor cultivation 3 to 4 feet apart. Make furrows 4 inches deep and cover seeds 1 to 1½ inches. After plants are up thin to 6 inches apart.

Watch for insects. Holes in the leaves indicate leaf beetles. Dust with some good insecticide like Garden Guard, End O' Pest, or Acme All Round Spray. Dust early and keep ahead of the beetles.

To produce record breaking crops inoculate the seed with Nitragin, and spray blossoms with "Blossom Set."

WAX BEANS Bush Type

Packet 15c

TOP NOTCH GOLDEN WAX. Plants are small, compact, erect and very prolific. Pods are borne well off the ground which prevents rust and rot, are of golden yellow color, brittle, fleshy and solid, with wax-like texture. A good shell bean for winter use. Seed oval, white with purplish eye. Length of pod, 4 inches; height of plant, 14 inches; days to maturity, 48.

***PENCIL POD BLACK WAX.** Plants are very productive, with straight pods of light golden yellow color, round, meaty, deeply crease-backed, extremely brittle and without fiber. An excellent quality for home and market gardens. Seed black. Length of pod, 6 inches; height of plant, 16 inches; days to maturity, 54.

These vegetables should be included in the well-planned town-lot gardens: Onions, carrots, beans, tomatoes, lettuce, spinach, parsnips, beets, peas, Swiss chard, New Zealand spinach, radishes, cucumbers and peppers.

If you want to live out of your garden you must first get into it.

GARDENING IS FUN

Sure it's fun to play golf, it's fun to fish and hunt, but when you get through you've had a lot of fun and perhaps a few fish or a few ducks, and often you come home empty handed.

But time spent in gardening practically guarantees you rewards of fine fresh vegetables, beautiful flowers and an attractive setting for your home.

Try it. It's the original "Do It Yourself" Hobby.



GREEN PODDED BUSH BEANS

Packet 15c

GARDENGREEN. An All-American Bronze Medalwinner, in a new and distinct type green bean. Yields an abundance of straight, round, bright dark green pods of excellent flavor and freedom from fiber. Plants bush type 18 inches tall. Pods 5 to 5½ inches long. Resistant to common bean mosaic.

***IMPROVED RESISTANT TENDERGREEN.** This is a special Mosaic Resistant strain of this fine new bean. All American Award of Merit in 1933. Pods absolutely stringless and fibreless, fleshy, nearly straight and round. Recommended for freezing. Seed is brownish-black, mottled tan. Length of pod, 6 inches; height of plant, 16 inches; days to maturity, 53.

WADE BEAN. It won the Gold Medal Award in 1950, All American Trials and topping all vegetables in the total number of points registered. It is excellent for home garden and market garden. Plants are rugged, bush type about 18 to 29 inches tall and pods borne well off the ground. Pods deep green, 5½ to 6 inches long, round, tender and meaty. Holds smooth edible stage longer than most and a most productive bean. Seed oblong with reddish brown color. Days to maturity, 65.

IMPROVED COMMODORE (Bush Kentucky Wonder). Bear over a long period, which with tenderness of pod and fine flavor make it an excellent home garden variety. Height 15 to 18 inches, pods 7 to 8 inches long. Days to maturity 58.

CONTENDER. Resistant to common bean mosaic and powdery mildew; a good market bean because a good yielder. Vines 12 to 18 inches tall, pods thick, oval, 10 inches long, medium green, stringless and tender. Not recommended for commercial quick freezing. Seeds buff with brown mottling. Days to maturity, 50.

***TOP CROP.** All American Gold Medal Winner for 1950. Beans are borne during a short period of time resulting in a few large pickings. Being resistant to bean mosaic it consistently outyields other similar varieties. Pods are medium, light green, straight and slightly curved, 5½ to 6 inches long, slender when young, meaty, entirely stringless and without fiber. The pods are free of blemishes, clean and attractive. Unexcelled for market, canning and freezing. Seeds are brown mottled and oval. Days to maturity, 53.

***Stringless Black Valentine.** This bean is prolific, hardy and heat resisting. Length of pod, 6 inches; height of plant, 16 inches; days to maturity, 50.

TENNESSEE GREEN POD. Sometimes called Dwarf Kentucky Wonder. Pods are flat, broad, almost straight, stringless in the snap stage. Seed yellowish brown in color. Length of pod, 8 inches; height of plant, 14 inches; days to maturity, 52.

***GIANT STRINGLESS GREEN POD.** Long pod strain. Plants are large, spreading and exceedingly productive. Recommended for freezing preservation. Pods are stringless and brittle in all stages. Seeds oval, yellowish brown in color. Length of pod, 7 inches; height of plant, 17 inches; days to maturity, 54.

***BURPEE'S STRINGLESS GREEN POD.** Pods are somewhat variable in size, generally more or less scimitar curved, extremely brittle, absolutely stringless, usually contain six seeds very crowded in pod. Recommended for preservation by freezing. Seeds color coffee brown with black eye-ring. Length of pod, 6 inches; height of plant, 18 inches; days to maturity, 50. Our Burpee's Stringless are the Landreth strain.

BOUNTIFUL. Immense pods are rich green, thick, broad, uniform in shape, stringless but slightly fibrous. Color, straw yellow with dark brown eye-ring. Length of pod, 7 inches; height of plant, 16 inches; days to maturity, 48.

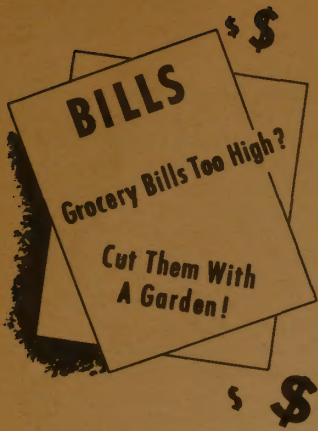
* Designates varieties recommended for Quick Freezing.

Maturity Period Indicates Number of Days Required to Produce Snap Beans.



IMPROVED
RESISTANT
TENDERGREEN

If you are guided by the phases and positions of the moon in planting your seeds, you will want to plant Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes and annual flower seeds during the second quarter of the moon.



GARDENING PAYS DIVIDENDS IN HEALTH AND ECONOMY

Most human efforts are put forth for economy, health, beauty or pleasure. But where, except in a garden, can you combine all four.

When you buy, let us say, a small quarter pound of seed beans, you are not merely buying a few beans but you are buying a miracle. Plant them, cultivate them and in due time you will be rewarded with bushels of delicious green beans worth many, many times their cost.

A bulletin issued by the U. S. Department of Agriculture in 1931 and revised in 1942 reported that half-acre garden, if properly cared for would supply vegetables having a market value of at least \$100.00 to \$150.00, sufficient for a family of five or six. Now that was back in 1942. With present prices, the value would be doubled.

And the work? It's not work. It's interesting, healthful exercise.

You just can't beat it.

POLE BEANS

Pole Beans are heavy yielders, but need more room than do Bush Beans.

Generally pole beans are trained on one strong, solidly set pole but often on three or four poles set in the shape of a teepee. The vines grow vigorously so do not have more than three plants to a pole or four to five to the teepee. Tie the runners loosely to the pole and keep the soil well cultivated.

***KENTUCKY WONDER** or Old Homestead. Moderately branched, good climbing plant of medium height. Pods scimitar curved, extremely brittle. An excellent bean for canning and recommended for quick freezing. Seed brown. Length of pod, 8 inches; height of plant, 5 feet; days to maturity, 65.

SCARLET RUNNER (Flowering Beans). Used either for ornamental purposes or green shell and snap beans. Flowers are bright scarlet. Splendid for covering trellises or fences. Pods are broad, flat, deep green. Seed purple mottled violet. Length of pod, 5 inches; height of plant, 12 feet; days to maturity, 65.

BLUE LAKE OR WHITE CREASEBACK. Grows about 6 feet tall, with dark, rough leaves. Pods 6 inches long, straight, crisp and tender. Flavor is excellent. Days to maturity 65.



KENTUCKY WONDER

All Packets 15c

LIMA BEANS

Bush Type

BURPEE'S BUSH LIMA. Plant large, thick stemmed with occasional runners. Shell pods dark green, of smooth surface moderately curved, flat, uniform in size. Very large for dwarf limas. Seed greenish white. Length of pod, 4 inches; height of plant, 19 inches; days to maturity, 75.

***HENDERSON'S BUSH LIMA** (Baby Lima). Small plant, slender stemmed, very erect, bushy, very early, long in bearing. Pods in numerous clusters close to center of plant. Especially adapted to West and Middle West. Seed white. Length of pod, 3 inches; height of plant, 12 inches; days to maturity, 66.

SPECKLED BUSH LIMA. One of the hardiest, and a sure cropper. Pods rather short and flat. Seed mottled. Length of pod, 3 inches; height of plant, 14 inches; days to maturity, 67.

***FORDHOOK BUSH LIMA.** Vines strong, erect, keeping bean pods off the ground. Bears immense crop of large pods, which contain three to five beans. Seed white. Length of pod, 4 inches; height of plant, 15 inches; days to maturity, 75.

Pole Type

CHRISTMAS or **LARGE SPECKLED LIMA.** A long season variety, producing extra large beans of green and mottled red Christmas colors. Height 7 to 9 feet, pods 5 to 5½ inches long with three seeds. Days to maturity, 90.

KING OF THE GARDEN LIMA. Largely grown and a valuable general purpose bean. Plant much branched, late, long-bearing. Seed white. Length of pod, 4 inches; height of plants, 5 to 8 feet; days to maturity, 88.

POLE SPECKLED LIMA (Florida Butter). Vine heavy, bears profusely through season. Small beans, are of good quality either in green or dry state. Seeds buff mottled with brown. Length of pod, 3 inches; height of plant 5 to 8 feet; days to maturity, 77.

DO NOT CULTIVATE when in full bloom or when plants are wet with dew. Keep vines picked to insure longer bearing period. Inoculate with Nitragin.



BURPEE'S STRINGLESS GREEN POD

DRY EDIBLE BEANS

WHITE NAVY. The long-time standard white cooking bean. Plants 16 to 20 inches high with tendency to vine. Pods tough and stringy. Seeds small, rounded oval, white. Days to maturity, 93.

GREAT NORTHERN. Similar to White Navy but seeds are larger. Days to maturity, 90.

PINTO. Colorado Pinto Bean is grown extensively in mid-western states and has a definite place in the shell bean market. Dwarf plants that stand a lot of dry weather. Beans flat, oval, mottled light brown.



BURPEE'S BUSH LIMA



WHERE?

First of all, the garden must be in the open where it can get sunlight at least six hours a day. Vegetables cannot be grown in the shade.

The plot must be well-drained, not subject to excess water.

The convenience of the garden location is more important than might be supposed. The garden should be as close to one's home as a suitable place can be found, because a garden needs some attention almost daily.

A rich, deep, friable sandy loam free from debris is the best all-purpose garden soil. Unless a soil is of such character that it can be spaded up in the spring into a loose crumbly condition, it will be difficult to work if not definitely unsuited to vegetable growing.

The town gardener takes what he can get, removes the stones or trash and does the best he can with it. If the soil is well drained and produces a rank, quick growth of weeds or grass, it probably can be developed into a good garden.

Fertilizers and soil conditioners are a big help.

TABLE BEETS

Packet 15c

Planting Instructions: Garden Beets. Even the beginner can grow good beets. They do best in rich sandy loam. Sow in rows 14 to 18 inches apart, space about one inch apart in the row. As beet seeds are slow starters it is a good plan to mix some radish seed with the beet seed. This marks the row and when you pull the radishes you leave space for the beets. Start thinning when plant are 4 to 6 inches tall. The pulled beet plants may be transplanted elsewhere or eaten as greens.

Beets will tolerate frost and can stand in the garden until the approach of hard freezing. They should be harvested when about 2 inches in diameter. Garden beets are generally damaged little by insects.

EARLY BLOOD TURNIP. Very early, fine quality, sweet and tender. Good for home and market garden and for canning. Excellent for winter storage. Roots globular with small tap root, flesh dark red with indistinctive lighter red zones. Days to maturity, 55.

EXTRA EARLY EGYPTIAN. Beet is small, but is exceptionally early. Dark red in color, flesh zoned a lighter shade or a shade of pinkish white. Days to maturity, 50.

DETROIT DARK RED. It has a round, somewhat oval root, very smooth, and a fine, deep blood-red color. The flesh is bright red and tender. Days to maturity, 55.

EARLY WONDER. One of the earliest beets. Tops medium small, erect with small collar or crown. Roots blood red, flattened globe with small tap root. Flesh purplish red zoned lighter shades. Days to maturity, 50.

SWISS CHARD BEET. Only the tops of this beet are used, like spinach. Stalks and mid-ribs may be prepared like asparagus. Days to maturity, 50 to 55.

MAMMOTH LONG RED MANGEL. Roots attain an enormous size, are smooth, uniformly straight and thicker than the common varieties. Flesh is rose and white. Fine for stock feeding. Days to maturity, 105.

BROCCOLI

Packet 15c

It's rather new in this country but now very popular. Well adapted to home garden and is grown essentially the same as cabbage. Plants can be grown for transplanting like cabbage, or the seeds for a late crop can be planted in place in the garden. By this method four or five seed in spots at 18-inch intervals in rows and later thinned to one plant.

ITALIAN GREEN SPROUTING. A distinct variety for the home garden. Plant forms a central head, fairly compact cluster of flower buds resembling cauliflower, except that it is green in color.

BORECOLE OR KALE

Packet 15c

Planting Instructions: Given about the same treatment as late cabbage. Sow seed ½ inch deep in rows 2 feet apart, and thin to 18 to 24 inches apart in the row. Extra hardy varieties may be sown in September and wintered over.

DWARF GREEN. Grows 16 to 20 inches high, can be used as a vegetable or for ornamental flower beds. Sown in spring. Days to maturity, 55.

Brussell Sprouts

Packet 15c

Definitely a cool season crop, plants are harder than cabbage and cultivated in the same way. The larger lower leaves should be removed to make room for the heads, but the top leaves should be left. Days to maturity, 60.

CABBAGE

Packet 15c

Cabbage is a cold weather plant and does best in spring and fall. Prefers moist soil. For spring cabbage, plant early maturing varieties and use when heads are well formed and solid. Several varieties mature in the fall and are available for winter storage. Red cabbage is very popular with some and grown the same as other late varieties.

Cabbage is started by sowing in hot beds or cold frames about two months ahead of time to set outdoors. To get the best plants transplant once before setting out in the field or garden.

Set the plants 2 feet apart in 3-foot rows or a little closer for early cabbage. Cultivate thoroughly as long as possible without injuring the plants, cabbage can be successfully irrigated but not after the heads are well started.

Watch for insects. The leaf eating bugs and worms should be dusted or sprayed with some stomach poison like Arsenate of Lead, Acme Duradust or D. D. T., and the sucking insects with some contact poison like Black Leaf 40. The amateur gardener will do best by spraying or dusting with some all-purpose insecticide like Acme Garden Guard or End O' Pest, which give protection against leaf eating worms and insects and sucking insects. Start spraying or dusting early but it's best to discontinue about ten days before harvest time.

Early Varieties

COPENHAGEN MARKET. Very early, round headed, exceptionally large, solid and of very fine quality. Leaves are medium light green, thick and smooth. Days to maturity, 80.

TRUE JERSEY WAKEFIELD. Heads evenly from latter part of June to first of July. Leaves yellow tint, stiff texture. Head very pale green; short; blunt and conical; sometimes tinged with red. Days to maturity, 75.

GOLDEN ACRE CABBAGE. Heads are round, firm, and of exceptionally fine texture. Average weight is about 4 pounds to the head. Days to maturity, 68.

STEIN'S EARLY DWARF FLAT DUTCH. A short-stemmed variety, well suited for market garden culture. Heads are somewhat smaller than the Early Flat Dutch. Days to maturity, 90.

Main Crop Varieties

LATE PREMIUM FLAT DUTCH. A tall stemmed variety, rather quick to head. The leaves are large and glaucous; head is big, flattened, full and solid. Days to maturity, 115.

DANISH BALLHEAD. A sure header. The heads are round, hard, and extremely heavy. Days to maturity, 110.

Yellows Resistant Varieties

JERSEY QUEEN. Exceptionally resistant to Yellows. Heads are of conical form, with broad base and pointed top. One of the first resistant varieties to mature. Days to maturity, 70.

MARION MARKET. Resembles Copenhagen Market but is late in maturing. Head is nearly round, yields heavily, and is excellent for kraut. Can be grown on yellows infested soil. Days to maturity, 80.

WISCONSIN BALL HEAD. Yellows Resistant. Heads rather small but very hard. Short stem with blue-green leaves.

RED ACRE. The earliest red variety. Plants small, compact and short stemmed; heads of medium size, round, very hard and heavy, red colored throughout. A good shipper.

DRUMHEAD SAVOY. Stem 5 to 6 inches high, stout, bearing a broad, thick, compact head, which is flat on top, sometimes tinged with wine-red, and almost perfectly smooth, being only partially crimped at the edges of the leaves. Outer leaves are numerous, broad, stiff, well spread out, and dark green in color. Bears early frosts very well. Days to maturity, 110.

CHINESE OR CELERY CABBAGE

PE TSAI—Wong Bok, Pekin. About 65 days. Sow last half of July or first of August for best results in this section. When matured this plant resembles Cos lettuce more than cabbage. Used in salads or may be cooked like cabbage or asparagus. Plants should be banked as they grow, or the leaves tied up over the center to produce celery-like form.

SWEET CORN

Packet 15c

In as much as Sweet Corn passes the peak of quality stage rather quickly, it is desirable to make successive plantings. The sugar content of green corn decreases very rapidly after harvest, thus freshly gathered corn is much superior. If you have never eaten Sweet Corn that was cooked immediately after gathering, you've missed a real treat.

One of the enemies of Sweet Corn is the Corn Ear Worm. To combat this, dust the silk with a 5% D. D. T. dust. Do this two or three times.

Or mix ¼ pint of 25% D. D. T. emulsible solution with two pints of white mineral oil (40 to 90 seconds Saybolt Viscosity). Shake well then add water to make a total of one gallon, and spray at full silk stage.

***STOWELL'S EVERGREEN.** This is the standard main crop variety. It is exceptionally tender and sugary. Length of ear, 7½ inches; number of rows, 14-20; days to maturity, 94.

COUNTRY GENTLEMAN (Shoe Peg). Ears large, kernels small but deep and without any row formation. It matures late. Length of ear, 8 inches; days to maturity, 90.

EXTRA EARLY ADAMS. The very earliest. Ears 6 to 7 inches long, slightly tapered, 10 to 14 rows of creamy white kernels of good quality. Days to maturity, 71.

TRUCKER'S FAVORITE. Ears 8 to 9½ inches long, cylindrical with 10 to 16 rows of medium deep, ivory white kernels of medium depth and good quality. Days to maturity, 84.

***GOLDEN BANTAM.** Yellow. Rather early variety, very tender and sweet, with rich flavor. Matures early and is comparatively free from worms. Length of ear, 6½ inches; number of rows, 8; days to maturity, 78.

HYBRID SWEET CORN

Hybrids are tailor-made, and therefore an improvement on the open pollinated varieties. But select the varieties that do best in your locality. The best ones are superior in yield and quality. Do not save the seed of hybrids for planting. The seed is no longer a hybrid and will not come true.

YELLOW

***GOLDEN CROSS BANTAM (Yellow).** Matures about 8 to 10 days later than Golden Bantam. Length of ear, 8 inches; number of rows, 12; days to maturity, 82.

MARCROSS. An early, large eared, wilt resistant market hybrid. Rows are straight, fairly well filled tips and heavy husk coverage. Plants are 5-5½ feet and well rooted. Length of ear, 7-7½ inches; number of rows, 10-14; days to maturity, 72.

IOCHIEF. All American Selection Gold Medal 1951. Very productive, drought resistant, vigorous, with very few suckers. Stalks 6½ feet tall, ears 8½ inches long with 14 to 18 rows. Kernels bright golden yellow, deep, tender and of fine flavor. Days to maturity, 83.

IOANA. An All American. The delicious flavor makes Ioana very popular. Ears about 8 inches long with 12 to 16 rows of deep, rather narrow, light yellow kernels. Days to maturity, 87.

TENDERGOLD. Somewhat earlier than Golden Cross Bantam. Ears nearly cylindrical, 1¾ inches in diameter with 12 to 16 rows of tender, golden yellow kernels. Days to maturity, 81.

WHITE

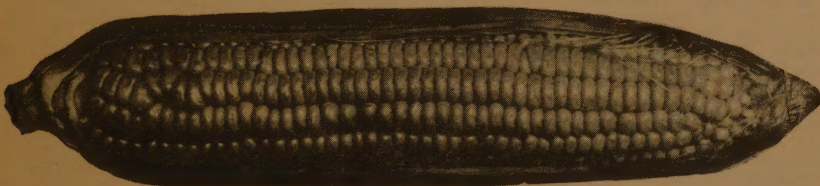
***HYBRID EVERGREEN (White).** Plant similar to Evergreen, but more tender. Grains semi-narrow, plant dark green. Length of ear, 8 inches; number of rows, 12-16; days to maturity, 90.

HYBRID COUNTRY GENTLEMAN. Retains all the good quality of this long time favorite but is more productive and more resistant to drought. Days to maturity, 98.

HYBRID TRUCKER'S FAVORITE. An early white dent, double cross hybrid. Tender and fairly sweet. Length of ear 9 inches. Days to maturity, 80.

Varieties marked * good for freezing.

GOLDEN CROSS BANTAM



COUNTRY GENTLEMAN



HYBRID EVERGREEN



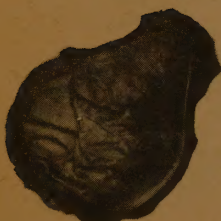
IOANA



DETROIT DARK RED



TRUE JERSEY WAKEFIELD



Should the Garden Be Fertilized?



Undoubtedly some garden soils are so rich as to need no fertilizer, but these are exceptions. Vegetables do best when well fed and this means fertilizers. Manure is always a good garden fertilizer, but is not available for all farm garden and very inconvenient to obtain for city gardens.

Some vegetables do best when more than normal quantities of certain fertilizing elements are applied. For instance, leafy crops like spinach, cabbage and lettuce often require higher percentage of nitrogen while root crops such as beets, carrots, etc., need a higher percentage of potash.

For all practical purposes a good 5-10-5 commercial fertilizer such as Vigoro or Vertagreen will satisfy the needs of most vegetables, flowers and grasses.

An excellent way to apply a 5-10-5 fertilizer is to broadcast it evenly over the garden at the rate of three pounds per 100 square feet and rake or harrow it into the top 3 or 4 inches of soil, or it can be side dressed alongside the rows. With this method a pound should treat about twenty feet of row. Do not let the fertilizer come in direct contact with the plants and stir it into the soil.

There are now a number of concentrated soluble fertilizers which are very effective plant boosters. These are mixed with water and the solution is applied at the base of the plants. These are also sprayed on the leaves for leaf feeding, but root feeding seems the more natural process.

Your Garden Can Be Beautiful



In thinking of "beauty in the garden," we naturally think of flowers, but a vegetable garden can be beautiful, too.

First of all, don't make your garden too large, in other words, don't bite off more than you can chew.

Lay it out carefully, keep the rows absolutely straight. If a planter is used, the first row should be marked off with a line to get it straight, and after that the marker on the planter will enable the operator to make straight rows. If the garden is planted by hand, a line should be used to get the rows straight. Set a stake at each end and tightly stretch a cord over the row. Rows should be marked off in some convenient way to open up a shallow trench in which to plant the seed. If many rows of the same width are to be planted by hand, it will pay to make a hand marker about four rows wide. Then the first row can be marked by a line and the others made by keeping one foot of the marker in the last row, marking three rows each time.

A marker can be made quickly and cheaply by taking a piece of board or "2 by 4" long enough to cover the four rows, and nailing four legs onto it at the distances wanted between the rows. The legs should be about 4 inches wide and rounded or bluntly pointed at the lower end to mark off the rows. A handle should be nailed and braced to the cross-piece and be long enough so the operator can walk in front of the marker. Different row widths can be had by changing the position of the legs on the cross-piece. This simple outfit is a time saver and convenient to use.

A small, clean garden, free of weeds, will give you much more pleasure and much greater satisfaction than a large one in which the constant fight to keep ahead of the weeds, becomes a nightmare.

Follow the idea of contour farming by making your rows across the natural flow of water. If your garden slopes in more than one direction, lay out your rows accordingly. Don't let the water flow down the rows.



SPADE SCIENTIFICALLY

First of all, take it easy. Spading is one of the first jobs in the spring and comes when you are soft. Therefore, take a little at a time. Don't overdo it.

Don't spade when soil is wet. The usual test is to squeeze a handful of soil. If it forms a ball that does not crumble, it is too wet.

Dig one trench across the end of the garden. Spade the bottom of that trench without removing any more of the soil.

Then spade with the blade at right angle to the trench. Lift the soil and upside down in the trench just dug. Then spade the bottom of this second trench without removing more soil and proceed as before. When you get the last soil dug you will need to bring the soil dug from the first trench to fill the last trench. This results in a good, deep, well spaded soil.

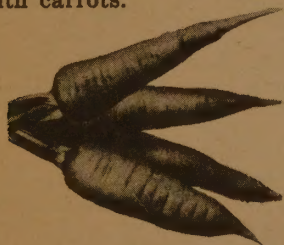
After spading, this soil should be hoed and raked thoroughly to make a fine, smooth seed bed.

CARROTS

Packet 15c

Carrots are a common root crop and a "must" in every garden as they rank high in vitamin food value. They are hardy and are relatively free from insect and disease troubles. For early use sow seed as soon as the ground can be worked in the spring and follow by successive plantings to provide young carrots throughout the season. If carrots are allowed to mature and stay in the ground they become woody and are not so palatable. A planting should be made in the summer, the time to be governed by the climate, to provide plenty of roots to store for winter use.

The seeds are difficult to plant without getting them too thick. They should be sown in drills and thinned to 2 inches apart in the row before the plants are 6 inches high. The first thinning may be to half this distance and the final thinning done later when the young carrots are large enough to use. Seeds should be covered about half an inch. Rows in the farm garden should be at least 2 feet apart to allow for easy cultivation. In small gardens for hand cultivating or under irrigation, the rows may be as close as 12 inches if the soil is fertile. There are few insect and disease troubles with carrots.



DANVER'S HALF LONG

IMPERATOR. All American Selection 1933. Seven to 8 inches long, deep orange colored throughout, brittle, and sweet, has practically no core. Days to maturity, 72.

DANVER'S HALF LONG. Fine for table use and best of all for the stock breeder. It is a slender half-long root, very well colored, and has a blunt end. Days to maturity, 75.

IMPROVED LONG ORANGE. For stock feeding and table use. Root is pale orange on the underground portion, and green above ground. It is a good keeper. Days to maturity, 80.

HIGH IN VITAMINS A AND B. Store in a cool, moist pit, cave or cellar to prevent shriveling.

***RED CORE CHANTENAY.** A fine early half-long, stump-rooted carrot. Color deep orange red, core of deeper color. Roots 5 to 6 inches long, 2 to 2½ inches thick at the crown. Days to maturity, 68.

NANTES HALF LONG, STUMP ROOT-ED. The flesh is orange red, fine grained. Roots grow from 6 to 7 inches long, holding their thickness throughout the entire length of the root and end abruptly into a thin, small tail. Days to maturity, 70.

CAULIFLOWER



EARLY SNOWBALL NO. 16

Planting Instructions: Clean and thorough cultivation is absolutely essential. Hoe right close to the plants, giving shallow cultivation as they expand. The "heads," to be kept white and tender, must be protected from the sun soon after they begin to form by tying the leaves together over them. The seed is sown in April for an early crop and in July for a fall crop.

***EARLY SNOWBALL No. 16.** Very early. Produces a very large compact head which is snowy white, which forms quickly and will not discolor easily. Finest on the market. Days to maturity, 55. Pkt., 25c.

COLLARDS

GEORGIA SOUTHERN or CREOLE. Forms a large, loose, open head, or mass of leaves on tall stem. Days to maturity, 90. Pkt., 15c.

CORN SALAD Broadleaved. Used as a salad. Seeds are sown late in August or in autumn in any soil. Plant produces leaves from October until spring without requiring any attention or protection. Pkt., 15c.

GARDEN CRESS. For Garnishing. Crisp, pungent leaves used as a condiment and for garnishing. Sow in a moist and shaded position to obtain more tender and more abundant leaves. Pkt., 15c.

WATER CRESS. Does best when grown along moist banks or in tubs in water-covered soil. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found. Pkt., 15c.

CELERY

Packet 15c

Planting Instructions: For this climate sow celery in May or early June, in drills 4 to 6 inches apart and cover about ¼ inch deep. When ready to transplant thin out to 2 or 3 inches apart in the row, and leave growing until July or August when they should be planted in rows 18 to 20 inches apart and set 6 inches in the row. In planting, press the ground around the plants but do not let any earth get into the heart.

GOLDEN SELF-BLANCHING



GOLDEN SELF-BLANCHING. Half dwarf, compact with well developed leaves. It needs very little blanching to fit it for the table. Days to maturity, 125. Pkt., 15c.

GIANT PASCAL. A very vigorous and an extremely productive variety, with short, broad, thick, tender and fleshy green ribs, which blanch very readily when earthed up. It keeps very well under cover during winter. Days to maturity, 135. Pkt., 15c.

WHITE PLUME. This variety is characterized by the silver-white color with which its leaves are partly tinged at first. It suffers easily from the cold and should be grown for autumn rather than for winter use. Days to maturity, 120. Pkt., 15c.

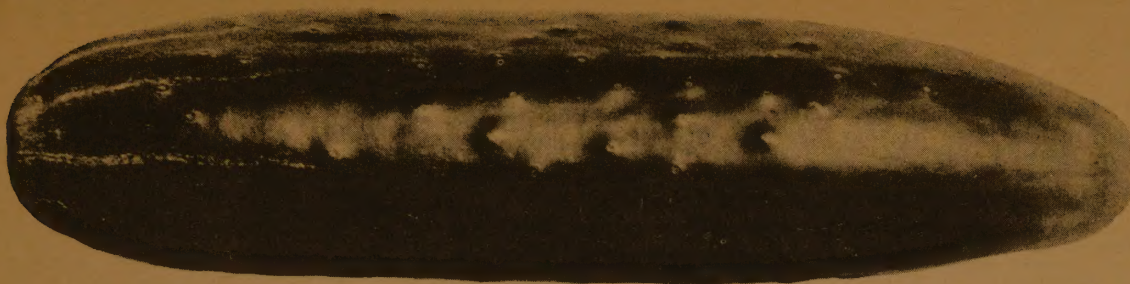
Celeriac or Turnip-Rooted Celery. **Planting Instructions:** Sow the latter part of April, covering seeds ¼ of an inch. Thin out to about 1 inch apart in the row and transplant into rows 1½ feet apart and 6 inches apart in the row.

Uses. Served as a salad with French dressing, or served hot with cream sauce.

Roots are turnip-shaped, very smooth, tender and marrow-like.

Soil Preparation

After your garden has been thoroughly spaded and pulverized, apply broadcast about 3 lbs. of some good fertilizer like Vigoro or Vertagreen. Rake this in and then water thoroughly. Wait three days and sow your seed.



IMPROVED LONG GREEN

CUCUMBERS

Packet 15c except when priced.

Planting Instructions: Cucumbers will grow in almost any soil that has good drainage but do best in warm light soils. When all danger of frost is past plant 8 to 10 seeds about ½ inch deep in hills about 4 feet apart. When the plants have made good growth thin to about three or four seeds to the hill. Earlier crops may be had by starting the plants in a hot bed and transplanting when danger of frost is past, or by planting early and keep the young plants covered with Hot Caps.

Keep the soil well fertilized and well cultivated between the plants until the plants cover the area, then hand weed if necessary. Cucumbers need plenty of water.

Plants should be dusted with some arsenical or other insecticide to kill leaf-eating insects and sprayed with Black Leaf 40 to get the aphids. A liberal dusting with Garden Guard will take care of both classes.

HYBRID CUCUMBER. Unequaled for size, shape and quality. Vines are very vigorous and bear for a long time. This results in large yields. One grower reports that he picked 728 good cucumbers from seven plants. Try it this season. Pkt., 30c;

PALMETTO. A downy mildew resistant variety developed for the South. Cucumbers dark green, 8 inches long, 2½ inches thick, small seed area and slightly pointed ends.

PICK THEM OFTEN

Some crops, like Cucumbers, Beans, and many flowers like Carnations and Sweet Peas, will stop bearing if the fruits or flowers are not picked constantly. Daily picking lengthens the season a great deal.

LONG GREEN IMPROVED

The old home garden standard. It's hardy, prolific and excellent for slicing. Fruit from 8 to 10 inches long and about 2½ inches thick. Dark green with white, crisp flesh. Matures in 67 days.

EARLY CLUSTER. A popular variety both for pickling and for early slicing. It often sets its fruits in clusters. The cucumbers are quite chunky, being about 5½ inches long and 2½ inches in diameter. Skin smooth and medium green in color. Matures in 52 days.

PRICKLY or WEST INDIAN GHERKIN. A creeping and very branching plant. Fruit is oval, green, with white longitudinal streaks, turning pale yellow when ripe. When ripe is about 3 inches long and over 1 inch in diameter. Days to maturity, 60.

STRAIGHT EIGHT. A Gold Medal Winner in 1935. One of the best for slicing. About 8 inches long and 1½ inches in diameter, straight and symmetrical. An excellent size for slicing and of a deep green when ready to use. Days to maturity, 66.

COLORADO (A&C). Fruits 9 to 11 inches long, slight taper at both ends, dark green, and hold up well in shipping. Days to maturity, 66 to 68.

NATIONAL PICKLING. One of the best all around pickles. Pickles are dark green, cylindrical, and blocky at both ends. Days to maturity, 55.

MARKETER. A dark green cucumber about 8 inches long, 2½ inches thick and tapering slightly toward each end. Flesh is crisp and seed cavity small. Fine for home use, market and shipping. Days to maturity, 65.

EGGPLANT

Packet 15c.

Planting Instructions: Sow in hot-beds very early in the spring; thin them out as soon as big enough to be handled to 3 to 4 inches each way and transplanted to 2 to 3 feet apart in very rich, warm ground. Do not plant them outside until the nights are real warm, as the least frost will, if it does not kill them, check the growth.

FORT MYERS MARKET. Fruits deep purple and long and oval. Very smooth skin and quite resistant to disease and heat. Days to maturity, 80.

BLACK BEAUTY. The fruits set freely and develop quickly, so entire crop can be harvested before frost. They are large, thick, lustrous purplish black. Days to maturity, 90.

NEW YORK IMPROVED Large Purple Spineless. Stem stout, not very tall, usually branching and of gray-green, slightly or not at all tinged with purple. Fruit is very large, of a short pear shaped and slightly flattened at both ends. Days to maturity, 92.

GARLIC

The root, or bulb, is composed of many small bulbs called "cloves," which are planted in the spring 6 to 8 inches apart, and in August the bulbs are ready to gather. Lb., 85c.

ENDIVE

Packet 15c

Planting Instructions: Same as Lettuce. Fine salad plant. Also used as "boiled Greens." Can be grown the year round. To blanch, tie the leaves together two or three weeks before gathering.

BROAD LEAVED BATARIAN. Bright green leaves which are broad, twisted and waved. White midribs. Crisp and tender. Used in soups, stews and salads. Days to maturity, 90.

GREEN CURLED. Best for general use. Leaves finely cut, having a mossy appearance. Pungent flavor. Days to maturity, 94.

FLORIDA DEEP HEART. An improved variety with larger leaf, broader, thicker and well branched heads, earlier in maturity. Upright growth with dense mass of thick slightly crumpled leaves. Favored by market gardeners and shippers.

PENCALIER. A rather late sort with large, curly, deep cut leaves. The foliage is crowded, dense at the center and readily blanches itself. The midribs are tinged with pink. Days to maturity 76.



KOHL-RABI

Packet 15c

Planting Instructions: Sow in the spring in rows 3 to 8 inches and afterwards thin out to 8 to 10 inches in a row. One ounce will produce 2,000 plants.

When used for the table it should be cut when quite small as it is then very tender and delicate, having the combined flavors of the cabbage and turnip.

EARLY WHITE VIENNA. The ball forms quickly in this variety and is ready to be eaten about two months from time of sowing. Days to maturity, 60.

LEEK

Packet 15c

Planting Instructions: It may be sown in drills or broadcast. When the plants are 6 inches high, transplant into rows about a foot apart, setting the plants 4 or 5 inches deep and about 6 inches apart in the rows.

LARGE LONDON or SCOTCH FLAG. Long, broad stems, leaves are rather dark green color, rather early and a very productive variety.

Mustard Spinach

Packet 15c

TENDERGREEN. A quick growing plant similar to foliage turnip but producing a crop of leaves in much shorter time. Earliest and quickest growing green. Very popular everywhere. Days to maturity, 28.

EARLY DWARF PROLIFIC



OKRA

MUSTARD

Packet 15c

Planting Instructions: Mustard greens or mustard spinach is an acceptable substitute for spinach and can usually be depended upon for satisfactory growth, even in poor soil. The seed should be sown as early in the spring as possible, or if wanted for a fall crop, in late July or early August. In the South the crops are often started in the fall for early spring salad. Seed is sown in drills about 12 inches apart, and the plants thinned to 5 or 6 inches in the row. Mustard has an especial appeal for the home gardener who has a fondness for "greens."

SOUTHERN GIANT CURLED. Leaves are twice the size of the ordinary White Mustard and the flavor is sweet. Days to maturity, 35.

CHINESE. Very hardy. A large plant, leaves are often 14 to 16 inches long, with the edges often turned underneath. The leaves are eaten like spinach. Days to maturity, 40.

FLORIDA BROAD LEAVED. Exceptionally large, thick, bright green, smooth leaves with toothed edges; a quick grower. Days to maturity, 40.

LETTUCE

Packet 15c

Planting Instructions: Lettuce should be in every garden as it is the most commonly grown salad crop. It prefers a rich, mellow, sandy-loam soil and does its best in the cooler parts of the gardening season. To have lettuce crisp and at its best, the growth must be rapid. To get this the plants should have plenty of moisture and fertilizer. Seed may be sown broadcast but the best way is to sow in rows about 1 to 2 feet apart. When the plants are up, thin to about 6 to 12 inches apart. It is best to make small but frequent sowings so that you will have fresh plants coming along during the season. Insects do not bother lettuce to any extent in the home garden.

LOOSE LEAF VARIETIES

OAK LEAF. Distinct because the deeply lobed leaves resemble oak leaves. Plants are medium large with thick, succulent, tender leaves. A fine home garden variety.

SALAD BOWL LETTUCE. A distinct new type of lettuce. A large, mid-season, medium green, lobed leaved, slow bolting, non-heading variety. The lobing of the leaves make them less subject to injury by breaking in handling. Develops into a large mound that looks like a big bowl of lettuce. An excellent source of Vitamins A and C. Pkt., 20c.

GRAND RAPIDS (Black Seeded). The best leaf lettuce to sow outside for the summer market, and recommended for family use. It does not form a head but produces beautiful, long, curly and wrinkled leaves. Days to maturity, 45.

BLACK SEEDED SIMPSON. Plant is compact and consists of a firm, well blanched, rounded to elongated and V-shaped cluster of leaves, closely drawn together. Days to maturity, 40.

EARLY CURLED or WHITE SEEDED SIMPSON. Plant spreading and forming a rounded to low V-shaped, well balanced, dense cluster of leaves. Days to maturity 40.

HEAD LETTUCE

BIBB. An entirely distinct variety, having small rosette heads, excellent for serving individual salads. Heads are firm with inside leaves golden yellow and outer ones dark green.

ICEBERG (White Seeded). A curled heading medium large, crisp, green variety, edges fringed and tinged with brown, a sort having outer leaves of strong ribs enclosing an exceedingly crisp, white interior. Days to maturity, 60.

EARLY PRIZE HEAD (White Seed). Forms a large, tender, crisp, loose head, bright green crimped leaves tinged with red. Days to maturity, 45.

Thin your lettuce plants so that each plant will have room to develop and you'll have more and better lettuce.

NEW YORK or WONDERFUL (White Seed). A very crisp variety, strictly cabbage-heading, very large, late, extremely slow to seed. Leaves blistered, crumpled and twisted. Days to maturity, 75.

NEW YORK NO. 12. An early improved strain of New York for spring and summer. It is a well bred selection of this famous lettuce, being lighter in color, more desirable for general planting. Days to maturity, 73.

GREAT LAKES LETTUCE. Imperial type that really stands up and produces heads in hot weather. Heads are large, deep green, with thick crisp leaves. Resistant to tip burn. Can remain in the field longer than other varieties before cutting. Days to maturity, 86.

IMPERIAL 847. Heads are medium large and solid. Does fairly well in hot weather and is resistant to tip burn. Black seeded. Days to maturity, 85.

IMPERIAL 44. Heads medium large, slightly flattened and compact. Days to maturity, 82.

BIG BOSTON (White Seed). A splendid shipper, sure header, reliable and hardy, and is a good late summer or autumn variety. Days to maturity, 70.

HANSON (White Seed). Plant spreading, but not loose in habit and forming a globular, extremely hard, well defined, well branched head, with leaves blistered, crumpled and twisted. Days to maturity, 65.

CULTIVATE



Cultivating is done for two purposes. 1—To keep the weeds out. 2—To keep a dust mulch which conserves moisture.

Weeds rob the cultivated plants of water, plant food, and even space, and light.

If the garden is cultivated once a week, especially during the early part of the season, weeds will be controlled, and the crops will get the benefit of the moisture and soil fertility.

Do not cultivate when soil is wet but work soil thoroughly as soon as possible after each rain or irrigation. This prevents crusting, and keeps the soil loose to conserve moisture and to readily absorb the next rain.

The cultivation should be shallow to avoid injuring the vegetable plant roots that lie near the surface. Many gardeners use a "Pull Hoe Weeder" which slips along just under the surface.

OKRA OR GUMBO

Packet 15c

The young green pods are used in soups or stews, or in the South as a separate side dish. They impart a rich flavor to soups.

Planting Instructions: Sow late in the spring, after the ground has become warm, in drills 3 feet apart, and when the plants are 3 inches high thin out from 10 to 12 inches. They should be well manured. They also can be started in a hotbed and transplanted afterwards.

EARLY DWARF PROLIFIC. It is a small fruited sub-variety of the Long Green Okra, but is earlier and more productive. The pods are very short. Days to maturity, 60.

WHITE VELVET. Distinctly unlike other varieties in that the pod is perfectly smooth and round. They are of attractive appearance and superior flavor and tenderness. Pods are of extra large size and produced in great abundance. Days to maturity, 65.

CLEMSON SPINELESS. A uniform, spineless strain of Perkins Long Podded type. Days to maturity, 60 to 55.

PERKINS MAMMOTH TALL GREEN. Pods bright, deep green, slender and meaty. Plants 5 feet tall, pods 7 inches long. Days to maturity, 56.

WATERMELONS

Packet 15c

Planting Instructions: The same as for Muskmelons, except that they should be planted from 8 to 10 feet apart each way.

NEW HAMPSHIRE MIDGET. 1951 All American Gold Medal Winner. A very small, extremely early maturing oval melon. Under favorable conditions it ripens in 65 days, and therefore very desirable for short growing seasons. Light or grey-green in color with narrow, irregular markings, average weight 2½ pounds, diameter 6 inches, with red flesh and very thin rind. Flesh solid and sweet. Seed black.

IRISH GRAY. Free from hard centers and strings, very firm, and does not break when sliced. Greenish gray color; does not sunburn. Seed white. Days to maturity, 90.

TOM WATSON. Immensely popular because there is delicious sweetness. The flesh is rich red, crisp and tenderly melting. Reaches the size of 24 to 28 inches in length, and 12 to 14 inches in diameter. It has a mottled, dark green rind, thin, but tough enough to stand shipping. Seed white, spotted with brown. Days to maturity, 90.

KLECKLEY SWEET. Well named, for the flesh of this melon is as sweet as honey. The rind is dark green, and only about one-half inch thick. Seeds are white, lying close to the rind, leaving a large solid heart. Days to maturity, 86.

KLECKLEY NO. 6. A wilt resistant variety of high quality developed by Dr. I. J. Wilson at the Iowa Experiment Station. Same type as Kleckley Sweet with same high sugar content. Days to maturity, 88.

EARLY KANSAS or RED RUSSIAN. Fruits large, oval, striped, with bright red flesh. Very sweet and of fine flavor. Rather hard shell makes it a good shipper. Seed reddish brown. Days to maturity, 82.

STONE MOUNTAIN. The fruits frequently weigh 50 to 80 pounds. The flesh is solid, bright scarlet in color, has few seeds, and is very sweet. Seed white. Days to maturity, 88.

STONE MOUNTAIN No. 5. A wilt resistant strain.

"KING AND QUEEN" WINTER WATERMELON. Spherical in shape, ivory shell, pink center. Average weight 25 pounds. The most luscious, handsome, and valuable winter watermelon in the world. Seeds black. Days to maturity, 85.

PIE MELON. Kansas Stock Pie Melon or Colorado Preserving Melon. A boon to the dry land farmer. The melons grow to a large size, some of them weighing as high as 60 to 70 pounds. The flesh is firm and solid with few seeds. Will keep all winter and can be fed to stock the same as turnips and beets.

FLORIDA GIANT or BLACK DIAMOND. Very popular throughout the Central West and southern districts. Makes a vigorous vine growth, does not sunburn as easily as many varieties; develops unusually attractive enormous fruits. Fruit large oval shape, very dark green color with bluish bloom; flesh bright red and of very sweet delicate flavor. Seeds dark brownish black. Days to maturity, 95.

DIXIE QUEEN. Flesh is bright red, rind thin, but tough; heavy yielder. Outer skin is light green splotched and striped with dark green. White seed. Days to maturity, 85.

KLONDIKE. A wonderful variety for local markets. Fruit is oblong, 16x10 inches, and weigh about 25 pounds. Flesh is deep red and the rind is dark. Sweet and firm. Days to maturity, 85.

Striped Klondike. Similar to Klondike except rind has irregular dark green green stripes on light green background.

NORTHERN SWEET. Sometimes referred to as Ice Box Melon. Melons small, nearly round, medium green with dark green stripes; rind very thin. Flesh deep red, crisp, sweet and of good flavor. Seeds light brown with darker edge.

GOOD TOOLS MAKE GARDENING A PLEASURE

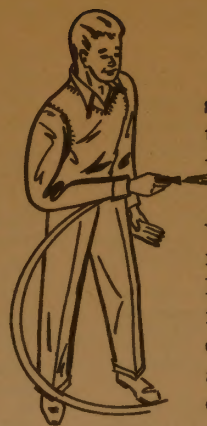
A good Spray Pump, Duster, Cultivator, Lawn Sprinkler all serve to make the work easier, faster and more efficient.

★ ★ ★



Upper left—"Tom Watson" Upper right—"Kleckley's Sweet"
Lower left—"Stone Mountain" Lower right—"New Striped Klondike"

Watering



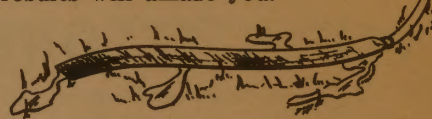
For best results, a garden should have moisture equal to about an inch of rain a week.

But remember, too much water is just as injurious, if not more so, than too little. Do not apply water until needed, but then do a thorough job. The water can be applied with a lawn sprinkler or can be applied by the irrigating method which flows the water along the rows. Soil soakers are excellent for watering rows of vegetables.

A good soaking about once a week under normal conditions is sufficient and very, very much better than more frequent light sprinkling.

TRY THIS

In watering your vegetables or flowers once every two or three weeks, add two level teaspoonfuls of Ra-Pid-Gro to each gallon of water. Apply with a sprinkling can and the results will amaze you.



Mulching

Mulching is for two purposes. 1—To conserve the moisture in the soil and "To keep down the growth of weeds."

Peat Moss is in our opinion the best material for mulching. Other materials such as straw, dried lawn clippings, leaves or similar material can be used very effectively.

The mulch should be applied between the rows and around the plants early, before the soil dries out. Such mulch is valuable, too, around non-staked tomatoes, cucumbers and bush squash plants to keep the fruits from contact with the soil, thus keeping the fruit clean.

The mulch should be of only medium depth after it has settled down, about 2 inches. A very deep, or thick much may defeat its purpose by absorbing the water from any light rain before it reaches the soil, thus making the water shortage more acute. Mulch is harmful in rainy areas, because it keeps the soil too wet.

As a general rule, it is best to rake off the garden and compost the material rather than working it into the soil.



PARSLEY

Packet 15c

Planting Instructions: Seeds germinate very slowly, three or four weeks elapse sometimes before germination. It should be sown early in the spring, previously soaking the seed for a few hours in tepid water. Sow thickly in rows a foot apart and half an inch deep.

MOSS or TRIPLE CURLED. In this variety divisions of leaves are deeply cut, giving the whole leaf a crimped or curled appearance. Extra fine for garnishing and culinary purposes. Days to maturity, 70.

TURNIP ROOTED. In this kind of Parsley it is not the leaves, but the thick fleshy roots which form the edible part of the plant. They are of a dingy white color, and resemble parsnips. Used mostly for flavoring soups. Days to maturity, 90.

PARSNIPS

Packet 15c

Planting Instructions: Parsnips are grown in the same manner as Carrots, only they may be sown earlier.

HOLLOW CROWNED or SUGAR. The roots, which are creamy white, grow 10 to 12 inches long and are smooth, tender, sweet and of excellent flavor. This variety is very easily raised and is very productive. Days to maturity, 95.

MUSKMELONS

Packet 15c

Planting Instructions. Muskmelons will grow on nearly any garden soil, but they will do best and mature earlier on a rich, sandy loam. The seed should not be planted until all danger of frost is past. Plant eight to ten seeds in hills about 6 feet each way, and cover to a depth of $\frac{3}{4}$ inch. After all danger of bugs is over, thin out to three or four strongest plants per hill, and cultivate until the vines cover the ground.

Green Fleshed Varieties

ROCKY FORD. It is of small size, oval shape, average weight is less than 2 $\frac{3}{4}$ pounds; skin is thin, netted, first green then a peculiar gray when ripe; flesh is pale green and very sweet. Days to maturity, 95.

HONEY DEW MELON. The average size is 6 to 8 inches in diameter, 7 to 8 inches in length, and weigh 5 to 6 very thick, fine-grained, and can be pounds. The flesh is emerald green, eaten to the rind. Days to maturity, 110.

Yellow Fleshed Varieties

HALE'S BEST NO. 36. Very early. Fruit oval but quite irregular in size and shape. Flesh is salmon colored; skin is very heavily netted. Days to maturity, 85.

HEARTS OF GOLD or Improved Hoodoo. Melons are of medium size, round and distinctly ribbed. Flesh is very firm, of a deep orange color, fine grained, of remarkable sweetness and juicy flavor. Days to maturity, 90.

IMPERIAL 45 or HALE'S BEST 45. Mildew resistant, oval shaped, medium size, with heavy net. Flesh deep salmon, thick and with small seed cavity. Days to maturity, 86.

QUEEN OF COLORADO. Melons are of good size, often weighing four pounds or more. Outer surface slightly ribbed covered with a gray netting. Flesh is very thick, sweet and of a deep orange color. Days to maturity, 88.

GOOD TOOLS MAKE GARDENING A PLEASURE

Every gardener needs a hoe, cultivator, several hand tools, spray pump, duster and of course hose and sprinkler.

ONIONS

Packet 15c

Easy to Grow . .

Good to Eat . .

Fine Keepers

Planting Instructions. Onions can be grown from seed, plants or sets. Sowing seed gives a wider choice of varieties, is more economical and some believe that onions grown from seed are sweeter. Onions do best in sandy loam which has been fertilized. Sow seed early in the spring in drills.

Frequent cultivation and hand weeding are both necessary because Onions must be kept clean.

For the small garden we recommend Onion Sets or Onion Plants. Mature onions from Onion Sets are the better keepers. Plant either sets or plants in rows about 14 inches apart and 2 inches apart in the row. Pull alternate plants for green onions, leaving the others to grow to mature onions.

SWEET SPANISH (Utah Strain). One of the largest and one of the best all around onions grown. Of attractive, light yellow color and a dandy shipper; flesh clear white, tender and sweet and mild flavor. Days to maturity, 110.

WHITE SWEET SPANISH. The pure white flesh of this onion is fine grained and exceptionally sweet. Days to maturity, 108.

WHITE LISBON. A very popular white bunching variety which is grown exclusively for table or green onions.

YELLOW GLOBE DANVERS. Globular shape, flesh white, mildly flavored; skin brownish yellow. Days to maturity, 112.

MOUNTAIN DANVERS. Considered by many onion growers as the best type of semi-globe shaped onion in existence. Small neck, bright, even color, and ripens very early; good keeper. Days to maturity, 110.

SOUTHPORT RED GLOBE. Skin is deep red and the bulbs are globe shaped, smooth surface, small neck and reach full size within 110 days. Strong flavor, very firm and superior quality. Days to maturity, 120.

LARGE RED WETHERSFIELD. Is a good drought resister. The skin is thick and of a deep red color. Days to maturity, 110.

WHITE SILVERSKIN or PORTUGAL. Bulb silvery white, flattened, and about 2 to 3 inches in diameter. An excellent medium early sort. Days to maturity, 100.

SOUTHPORT WHITE GLOBE. Bulb is silvery white, with a diameter of from $2\frac{1}{4}$ to $3\frac{1}{4}$ inches, firm, and keeps remarkably well. Days to maturity, 112.

BARTELDES EARLY GRANO. This is an excellent new onion which is becoming popular wherever used. Globe type, top-shaped, of light straw color, and very sweet and mild in flavor. Days to maturity, 85.

YELLOW EBENEZER. An excellent keeping, flat, mild onion. Used extensively for growing yellow onion sets. Days to maturity, 100.

WHITE EBENEZER. A new variety that is very similar to the yellow and promises to be very popular. Days to maturity, 100.

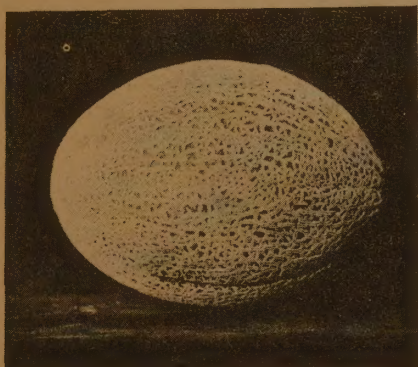
WHITE BERMUDA. They are called white, but really are of a pale yellow color, very large size and of extremely mild, pleasant flavor. Days to maturity, 90.

CRYSTAL WHITE WAX. This is a large, flat, pure white onion, which is shipped in such large quantities from Texas each season. It matures early, is very productive, and is mild and sweet. Days to maturity, 90.

ONION SETS Extra Fine

RED, YELLOW or WHITE BOTTOM SETS. Plant for spring green onions or for mature winter onions.

★ ★ ★



HALE'S BEST 45



HEARTS OF GOLD

YELLOW GLOBE DANVERS



TRANSPLANTING



Generally transplanting retards the growth of the plant, but in many cases is desirable. Small plants of tomatoes, lettuce, beets, cabbage, and similar vegetables are easy to transplant. They withstand this rough treatment better than plants of peppers, eggplant, and the vine crops, which are commonly transplanted.

For best results, most plants for transplanting should have a mass of soil and undisturbed roots attached.

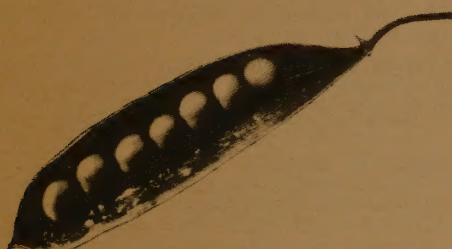
The soil of the garden should, of course, be thoroughly worked into a fine loose condition before the plants are set. In trans-

planting, the hole in the soil can be made with the hand, a peg, or a trowel, whichever is easiest; but the hole should be large enough to receive the roots and any adhering soil of the plant without crowding. Soil is then filled in around the roots and pressed down firmly to insure contact with all roots. Then water each plant to lessen the shock and draw the soil to the roots to prevent air pockets.

Muddling the plants in water to which a starter solution like "Take Hold Plus" or "Transplantone" has been added will give the plant a much better start.

PEAS

Packet 15c



LITTLE MARVEL

Planting Instructions: Freshly gathered, home-grown Peas are a real treat. The Pea is a cool weather plant, so make your first planting of Alaskas as soon as the ground can be worked. Follow this in about two weeks with later maturing varieties so you will have fresh garden peas over longer period.

Plant in single or double rows from 1½ to 3 feet apart, dropping a seed every inch and covering from 2 to 3 inches.

In order to encourage continuous bearing, pick the pods just as soon as they become fit to eat.

Aphids, small sucking insects, are the most common insect pests on Peas. Spray or dust with a contact insecticide containing Rotenone or Black Leaf 40.

EARLY SMOOTH VARIETIES

ALASKA Wilt Resistant. A remarkably early variety, and a good yielder. Pods round, straight and square ended, containing six light green peas. Length of pod, 2½ inches; length of vine, 2½ feet; days to maturity, 52.

EARLY WRINKLED VARIETIES

***LAXTONIAN.** Pods averaging 4¼ inches long, straight and pointed, containing seven or eight large peas. Length of pod, 4 inches; length of vine, 18 inches; days to maturity, 58.

* Recommended for "Quick Freezing."

WANDO. Recommended to stand both hot and cold weather. Pods are dark green, blunt and contain 7 or 8 medium size peas. Excellent for freezing, canning or fresh use. Vine 2½ feet tall. Days to maturity, 68.

NOTT'S EXCELSIOR. It stands drought better than most other varieties. The vines are high and self-supporting. Length of pod, 3 inches; length of vine, 26 inches; days to maturity, 60.

AMERICAN WONDER. Quite distinct from all other peas in habit of growth and appearance; pods are straight, well filled to the ends. Length of pod, 2½ inches; length of vine, 16 inches; days to maturity, 57.

***THOMAS LAXTON.** Very popular, early, large-podded, hardy variety. Length of pod, 3½ inches; length of vine, 30 inches; days to maturity, 60.

LITTLE MARVEL. An early dwarf variety of excellent quality; extensively used for shipping and local marketing. Length of pod, 3 inches; length of vine, 18 inches; days to maturity, 60.

DWARF TELEPHONE. Length of pod, 4 inches; length of vine, 2 feet; days to maturity, 74.

MAIN CROP VARIETIES

***TALL TELEPHONE OR ALDERMAN.** Very robust; producing pods of very large size. Length of pod, 5 inches; length of vine, 48 inches; days to maturity, 70.

GIANT STRIDE Wilt Resistant. Vines 16 to 18 inches tall, dark green with father large pods well filled with peas of excellent flavor. Matures in 74 days. Length of pod 4½ to 5½ inches, containing 8 to 10 peas.

EVERBEARING. Plant has a remarkable branching habit; will do well without sticks or brush. Length of pod, 4 inches; length of vine, 2½ feet; days to maturity, 73.

LAXTON'S PROGRESS. May be planted almost as early as smooth pea varieties. Length of pod 4 inches; length of vine, 20 inches; days to maturity, 60.



BULL NOSE PEPPER

DWARF GRAY SUGAR. A dwarf plant, producing an abundance of edible pods which are very sweet and tender. Length of pod, 2 to 3 inches; length of vine, 2½ feet; days to maturity, 66.

BLACK EYE RESISTANT NO. 5 OR RAMSHORN. Pods not edible. Green peas large and reach full maturity about 15 days later. Used mainly as dried peas which are good keepers. Length of pod 7 inches, length of vine 40 inches; days to maturity, 47. ½ lb., 20c; 1 lb., 35c.

PEPPERS

Packet 15c.

Planting Instructions: They thrive best in a warm, deep, fairly moist, fertile, sandy loam, although they are often grown commercially on moderately heavy soils. They should be started in hotbeds, in February or March, and not planted outside until the soil is warm and there is no danger of frost. Set the plants in rows 2 feet apart and 18 inches in the row.

SWEET VARIETIES

RUBY GIANT. The peppers are of very large size and so sweet and mild that they can be eaten raw. The flesh is very thick and when ripe is of a deep red color; matures early. Days to maturity, 75.

CALIFORNIA WONDER. This new introduction of sweet pepper has strong, thick walls which are crisp and juicy. Fruits are about 4¼ inches long and 3½ inches in diameter. Days to maturity, 76.

RUBY KING. A remarkably mild and pleasant pepper of bright red color, growing 4 to 5 inches long by about 3 inches through. The fruit is tapering or cone-shaped. Days to maturity, 70.

LARGE BELL OR BULL NOSE. A thick-set plant of light green color, branches short and stiff; fruit has four deep furrows and four corresponding ridges along the sides. Flesh is very thick with few seeds. Usually mildly flavored. Days to maturity, 60.

HOT VARIETIES

CAYENNE OR LONG RED. The leader for drying, grinding and sauces. 24 to 30 inches tall; pods 5 to 6 inches long. Very pungent, green, turning to brilliant red. Days to maturity, 70.

SMALL RED CHILI. The really hot pepper. Fruits are 2 to 2½ inches long, light green turning to deep red. Used for sauces, pickling and drying. Days to maturity, 84.

Insects Are Not So Tough If You Hit Them Early

The fight between man and insects is as old as time, and will probably continue indefinitely.

Fortunately for mankind, our chemists and other scientists have been bringing forth new chemicals, new formulations, and new methods of treatment.

In general, the enemies of plants fall in three classes:

- 1—Leaf-Eating Insects.
- 2—Sucking Insects.
- 3—Fungus diseases, such as black spot, downey mildew, etc.

Leaf Eating Insects Are Always With Us

The long practiced and still good way to kill leaf-eating insects is to spray or dust the plant with some poison like Arsenate of Lead or Paris Green. Then when the insects or worms eat these leaves they are poisoned and die. This method is still effective, but we now have some new insecticides added to the old ones. Among these are Rotenone, DDT, Lindane and Chlordane. These kill as stomach poisons, and as contact sprays.



RADISHES

Packet 15c, Except Champion

Planting Instructions: Radishes are one of the first vegetables planted in the spring and the quickest to mature. They need fertile soil, plenty of moisture and cultivation to be in best condition for eating. The seed is sown in shallow drills and successive sowings should be made at ten-day intervals. Radish seeds are often sown thinly in rows of slow germinating seed, like beets, parsnips and carrots, to mark the rows so cultivation can start before the main crops are up.



EARLY SCARLET GLOBE

EARLY VARIETIES

SPARKLER. The best of the round white tipped varieties. A very early and excellent variety both for forcing and sowing in the open ground. It is ready in about 20 days. The color is a vivid scarlet with white tip. Days to maturity, 20.

CRIMSON GIANT GLOBE. When mature they measure 6 to 8 inches in circumference, weight one ounce; their pure white flesh remaining firm and crisp, and of mild flavor. Days to maturity, 30.

EARLY SCARLET TURNIP. Root very round, of very bright color; flesh white, firm, crisp. Days to maturity, 26.

EARLY TURNIP RED WHITE TIPPED. Round, red with white tip. Days to maturity, 25.

FRENCH BREAKFAST. Olive shaped. Skin is bright pink on the upper part, and white on the lower part. It is very productive, early, exceedingly crisp and tender. Days to maturity, 25.

CHAMPION. All American Bronze Medal Winner. Bright scarlet radish with crisp, juicy white flesh. Ball shaped with slender tap root and will remain crisp even when quite large. Needs plenty of room to develop. Pkt. 25c.

EARLY SCARLET GLOBE, SHORT TOP. One of the most popular among gardeners and shippers because of its uniformity, attractiveness and a minimum of top growth. Of globe shape, very uniform and smooth with bright scarlet color. Days to maturity, 23.

CHERRY BELLE. One of the newer varieties. Very early with short top and well adapted for greenhouse or hotbed forcing. Cherry red in color, small, round with very fine root. Days to maturity, 22.

CAVALIER. Oblong, globe shaped of bright scarlet color with firm white flesh. Short tops. Excellent for forcing and a long keeper. Days to maturity, 25.

LONG VARIETIES



WHITE ICICLE. An entirely distinct, long, white variety. Ready for use fully as early as Long Scarlet Top, with less foliage, rendering it most desirable for forcing. Superior to any of the red varieties. Days to maturity, 27.

SUMMER VARIETIES

WHITE STRASBURG. A productive variety which withstands summer heat well. Root is long, about 4 to 5 inches, pointed; skin is white, rather tender. Days to maturity, 39.

WINTER VARIETIES

This name is applied to those kinds which have such firm-fleshed roots that they will keep through a great part of the winter without becoming hollow. They should be sown in July or August.

LONG BLACK SPANISH. Root reaches a length of from 7 to 10 inches. Skin is very black, and somewhat wrinkled; flesh is white, firm and compact. Days to maturity, 62.

ROUND BLACK SPANISH. Root is round, sort of top-shaped, skin is black; flesh white, very firm. Roots keep well. Days to maturity, 60.

WHITE CHINESE OR CELESTIAL. A beautiful, large, white radish grown very extensively by the market gardeners for fall and winter trade. Root is white, cylindrical, very firm and mildly flavored. Days to maturity, 60.

ROSE CHINA WINTER. Root is large, red, with white tip. A very good keeper, and more mildly flavored than the Spanish types. Days to maturity, 53.

SUCKING INSECTS

These include aphids (plant lice) leaf hoppers, lace bugs and thrip. Probably the most troublesome for the amateur gardener and especially for the flower grower are the little green plant lice on roses, the little black plant lice on chrysanthemums, and the very tiny mites or red spiders on evergreens.

These small plant lice sometimes nearly cover the tender tips of roses, chrysanthemums and other flowers. The red spiders are so very small that they cannot be seen with the naked eye but if present can be detected by shaking the branches over a piece of white paper.

These insects do not eat the leaves of plants but suck the plant juices, so they must be killed by some contact poison which kills by its burning action, poisoning through the breathing apparatus, or by suffocation.

Among the standard insecticides to kill these are Black Leaf 40, Lindane, Aramite, Dimite, Rotenone, Pyrethrum, Sulphur, etc.

Most of the all-purpose insecticides contain one or more of the above and are therefore effective in combatting these little pests.

Fungus Diseases

Fungus diseases are spread by tiny spores which float around on the breeze. The oldest (over a hundred years old) and still the standard remedy is Bordeaux Mixture. This is made of Copper Sulphate, and lime in the proper proportion.

Remember that in combating fungus diseases, an ounce of prevention is worth a pound of cure. Start spraying early in the season.

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All Purpose Sprays and Dusts

These are of the greatest help to amateur gardeners. These are combinations of insecticides formulated to take care of leaf-eating insects, sucking insects and fungus diseases.

With a good spray pump, the proper size for the amount of work to be done, or a good duster and an adequate supply of one of these all-purpost insecticides, the amateur can keep his vegetables and flowers clean and healthy.

But, don't wait for the bugs to appear or the diseases to show up. Spray or dust once every week or ten days throughout the season. This takes but little time, and the results are well worth while.

Among these All-Purpose Sprays are "Acme All Round Spray," "Garden Guard," "End O' Pest," and "Barteldes Rose Dust."



PUMPKIN

Packet 15c

Planting Instructions: They require the same general culture as melons and squashes. The common practice is to plant the seeds in the cornfield, either in hills or between the rows, after the last cultivation.

SMALL SUGAR. Most desirable variety for making pies. Smaller than the field pumpkin, round, flattened, fine grained, sweet and very prolific. Days to maturity, 112.

CONNECTICUT FIELD. The well known old Connecticut variety. Skin is of orange color, with deep orange flesh. Generally grown for feeding dairy stock. Days to maturity, 120.

CHEESE. A heavy yielder, and very good for a main crop variety. Flesh is pale yellow, tender, and of excellent quality. It is fine for pies. Days to maturity, 108.

KENTUCKY FIELD. A large variety, hardy, late and very prolific. Fruit is rounded, flattened, with sweet yellow flesh. Excellent for canning. Days to maturity, 120.

KING OF MAMMOTH OR GENUINE MAMMOTH. The flesh and skin and of bright, golden yellow. It is one of the very best pie pumpkins ever grown, and a splendid keeper. Days to maturity, 120.

CUSHAW OR CROOKNECK. Sometimes called White Crookneck Squash. Has a hard white or green striped shell, and sweet, solid, yellow flesh. It is a good pie pumpkin. Days to maturity, 115.

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RHUBARB

Packet 15c

Planting Instructions: Succeeds best in deep, somewhat retentive soil. The richer its condition and the deeper it is stirred, the better. Sow in drills an inch deep, and thin out the plants to 12 inches apart. The following spring, transplant from 4 to 5 feet apart each way.

VICTORIA. A little later than Linnaeus. Stalks red, very thick, leaves broader than long, heart-shaped or rounded.

RHUBARB ROOTS

Ask for Prices

SALSIFY OR OYSTER PLANT

Packet 15c

Planting Instructions: Sow the seed in the spring in drills 1 foot apart and 1 inch deep, thinning out plants to 4 inches.

This vegetable, when cooked, resembles the oyster in flavor, is comparatively easy to grow, habits similar to those of the parsnips. Can be left in the ground during the winter; in fact, frost improves the quality.

MAMMOTH SANDWICH ISLAND. This is the largest variety; very uniform in size; most popular sort for this section.

SPINACH

Packet 15c

Planting Instructions: The first sowing of Spinach should be made one or two weeks before the last expected spring frost. Plant in rows 12 to 18 inches apart and then thin to 2 or 3 inches in the row. Successive plantings should be made until the approach of hot weather. Fall plantings, very popular, can be made up to within six weeks of first expected frost.

SAVOY LEAVED OR BLOOMSDALE. A rather curious kind with fairly large, much crumpled, glossy dark green leaves. Days to maturity, 39.

BLOOMSDALE LONG STANDING. Similar to the older type, but leaves are thicker, more rounded, and glossy. The new selection will remain a long time in condition for use without bolting, even in hot dry weather. Ready for cutting in about 40 days. Very good for successive sowings. Days to maturity, 42.

NEW ZEALAND. Not a true Spinach. A large, freely branched, spreading plant that produces a succession of small, very thick and fleshy, pointed leaves on round fleshy stems. The leaves and tips of branches are picked for cooking like Spinach. Days to maturity, 70.

Spinach does best when well fed. Broadcast some good commercial fertilizer before sowing and then as a side dressing. You'll be pleased with the results.

SQUASH

Packet 15c

Planting Instructions: The vining or winter squashes require a lot of room but the bush or summer squashes can be grown in any moderate garden. The summer or bush squashes should be planted in hills from 4 to 5 feet apart and the winter or vining kinds in hills from 6 to 10 feet apart, ten to twelve seeds in each hill, but thin them down to three plants in the hill.

BUSH or SUMMER SQUASHES

SUMMER CROOKNECK. A small crooknecked summer squash; fruit of a very bright, orange color, elongated, covered with numerous roundish excrescences. It is very early, productive, and of excellent flavor. Days to maturity, 50.

EARLY WHITE BUSH. Also known as the Patty-Pan squash. Very productive, very early. Days to maturity, 55.

WINTER SQUASHES

DELICIOUS. This fine new winter Squash is of the finest quality possible. In size it closely resembles the original Hubbard. For table use it cannot be excelled. Days to maturity, 105.

IMPROVED HUBBARD. Very hard, dark green shell, heavily matted; flesh is dry and sweet. Days to maturity, 100.

GOLDEN HUBBARD. Smaller than Hubbard, earlier to mature, and of a rich orange red instead of the dark olive green. Days to maturity, 90.

TABLE QUEEN. Also called Acorn and Des Moines. A small Squash 4 to 6 inches long by 3 inches in diameter. Shaped somewhat like an acorn with sides scalloped. Color of rind deep green, turning to orange when ripening. Matures early and is very prolific. Days to maturity, 58.

BLACK ZUCCHINI. Straight, cylindrical fruits, 3 to 4 lbs., 3 to 5 inches in diameter and 10 to 14 inches long. Very dark green color. Delicious when French fried. Days to maturity, 60.

• • • • • TOMATOES • • • • •

Packet 15c

Planting Instructions: For a small garden, sow a few seeds in a shallow box or flower pot the beginning of March, and place in a sunny window. About May 15, set plants in the garden, 3 feet apart each way, watering freely at time of transplanting. If a large area is to be planted, sow seed in the hotbed in rows 5 inches apart and $\frac{1}{2}$ inch deep. They should have frequent shallow cultivation. Water with RAPID-GRO when transplanting.

Wonder Boy

A New Hybrid
See back cover

RUTGER'S. Medium to large fruits, shaped similar to Marglobe, but more flattened at the stem end. Color is fine red, seed cavity small. Days to maturity, 72.

MARGLOBE (Wilt Resistant). The Marglobe fruits are smooth, globular, meaty, almost coreless, and deep scarlet in color. They ripen uniformly, even around the stem, and resist cracking well. Days to maturity, 77.

EARLIANA. Fruits are deep scarlet and grow closely together in clusters of five to eight, are of medium size, smooth, and solid. Days to maturity, 66.

NEW STONE. A fine main crop variety. The vine is a strong grower, very productive, and its fruits are large, smooth, rounded or deep and slightly flat at the top and bottom. Days to maturity, 86.

The cutworm is a natural enemy of tomatoes. Dust the soil with Chlordane dust or wet soil with a chlordane solution.

For finest tomatoes dust repeatedly with Acme Tomato Dust and spray the blossoms with Blossom-Set.

BIG BOY—Giant Hybrid Tomato. Fruits of this first generation hybrid will weigh from one to two pounds. Firm, smooth, scarlet-red, thick walled and real meaty. Mature in 78 days after plants are set out. Packet of 30 seeds, 50c.

GROTHEN'S GLOBE. An improved Break O' Day with heavier vines. Fruits red with thick walls and firm meat. Days to maturity, 68.

GREATER BALTIMORE (The Great Canning Tomato). On account of its size, shape, color and enormous yield the Greater Baltimore has become immensely popular with the canners. It yields heavily and is a most dependable variety. Days to maturity, 82.

BISON. An extra early self-topping variety. Fruits are scarlet or red, medium size, thin cell wall. Vine is dwarf, vigorous and a heavy producer. Recommended as an early variety. Days to maturity, 68.

PONDEROSA. Although this variety has been known for a long time, it is still unsurpassed for size. The immense fruits often weigh $1\frac{1}{2}$ to 2 pounds, are meaty, and of delicious flavor. Days to maturity, 88.

GOLDEN PONDEROSA. Similar to the Red Ponderosa except in color. Many consider the yellow of better flavor and less acid. Very attractive in combination with red slices on a salad plate.

FIRESTEEL TOMATO. Fruits are scarlet red, medium size, almost globular, smooth, small core, very fleshy and firm. Practically no cracking. Days to maturity, 65.

SMALL TOMATOES

YELLOW PEAR, RED PEAR, RED PLUM, YELLOW PLUM. Used for preserving.

A mulch of straw or grass clippings around the plants retains moisture, keeps down weeds and keeps the fruit off of the ground.

SIoux. Adapted to northern areas and high elevations as well as to soils having high nitrogen content. Vines of medium size but very productive. Fruits medium size, globe shaped, scarlet and of fine flavor. Days to maturity, 68.

URBANA. Honorable Mention All American Selections 1951. Plants are very compact and bushy, bearing heavily with good protection for the fruits. Fruits are deep scarlet, medium size and deep scarlet with firm flesh with small seed cavities. Days to maturity, 75.

FIREBALL. Recommended by Kansas State College. The fruits are rather small but are useable and marketable and set extremely early. The plants are small and can be closely spaced. The fruits are globe shaped and a nice red color.

HOMESTEAD. A recent introduction developed by the U.S.D.A. Very resistant to Fusarium Wilt and has great promise as a shipping tomato. Vines are very dense and the tomatoes have the same general shape and quality of Rutgers but with a lighter green shoulder and a trifle smaller. Days to maturity, 78.

WESTERN RED. Recommended by The Kansas Experiment Station at Manhattan. Bred and selected for its characteristic of setting fruit under hot and dry conditions. It has proven to produce much higher yields than other well known standard varieties under adverse climatic conditions.

Vines are medium size and determinate in growth. Rather open foliage but the fruit resists sun scald remarkably well. Mid-season in maturing, fruits of medium average size, light red color and mild in flavor. Recommended especially for southwestern Kansas, western Oklahoma, eastern New Mexico and western Texas. Days to maturity 68.

GLAMOUR. This heavy yielding, flattened globe-shaped variety is gaining in popularity as a canning tomato. It is comparatively crack-free and therefore produces a high percentage of No. 1 tomatoes. The fruit will average 7 ounces and ripen to a bright red. It is quite solid and is suitable for the market and home garden, as well as for canning. Recommended by the Kansas Experiment Station at Manhattan. Days to maturity 77.

Dust Tomato Plants with Acme Tomato Dust for protection against Blight, Hookworm, Fruitworm and Flea Beetle.



PONDEROSA



STOKESCROSS No. 5



MARGLOBE

NOTE: TIME LISTINGS BELOW ARE CENTRAL STANDARD TIME.

● 1st QUARTER MOON, INCREASING

—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye, Wheat.

● 2nd QUARTER, MOON INCREASING

—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes, flowers, and cereals.

When possible, plant seed while the Moon is in the fruitful signs of Cancer

(♋), Scorpio (♏), or Pisces (♓). The next best signs are Taurus (♉), Libra (♎) and Capricorn (♏).

● 3rd QUARTER, MOON DECREASING

—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, Turnips, Tubers.

● 4th QUARTER, MOON DECREASING

—In 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths, especially when Moon is in barren signs, Gemini (♊), Leo (♌), Virgo (♍) or Aquarius (♒).

Signs of the Zodiac and Their Accepted Influences

♈ **ARIES:** Tends to dryness, barrenness. Fairly good for cultivating, spraying and weeding.

♉ **TAURUS:** Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.

♊ **GEMINI:** Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ **CANCER:** Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ **LEO:** Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

♍ **VIRGO:** Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

♎ **LIBRA:** Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ **SCORPIO:** Next to Cancer in productivity. Irrigate but do not dig potatoes.

♐ **SAGITTARIUS:** Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ **CAPRICORN:** Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ **AQUARIUS:** Somewhat barren. Good only for cultivation and extermination of pests.

♓ **PISCES:** Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

When to Plant

The tables at right show when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Mountain Standard Time and Central Standard Time). Then we show the moon CHANGES (day and hour) for each month.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
1 ♈ .10:41p 4 ♈ .1:43a 6 ♈ .4:19a 8 ♈ .8:15a 10 ♈ .1:07p 12 ♈ .9:03p 15 ♈ .7:37a 17 ♈ .8:27p 20 ♈ .8:21a 22 ♈ .5:11p 24 ♈ .10:49p 27 ♈ .2:05a 29 ♈ .4:18a 31 ♈ .6:52a	2 ♈ .10:14a 4 ♈ .3:04p 6 ♈ .9:09p 9 ♈ .5:38a 11 ♈ .4:13p 14 ♈ .4:24a 16 ♈ .5:08p 19 ♈ .2:59a 21 ♈ .9:24a 23 ♈ .11:50a 25 ♈ .0:52p 27 ♈ .1:57p	1 ♈ .4:08p 3 ♈ .8:42p 6 ♈ .3:27a 8 ♈ .0:35p 10 ♈ .11:30p 13 ♈ .11:51a 16 ♈ .0:45a 18 ♈ .1:44p 20 ♈ .7:03p 22 ♈ .10:27p 24 ♈ .11:16p 26 ♈ .10:57p 28 ♈ .11:36p 31 ♈ .2:32a	2 ♈ .8:54a 4 ♈ .6:35p 7 ♈ .6:00a 9 ♈ .6:25p 12 ♈ .7:12a 14 ♈ .6:53p 17 ♈ .3:57a 19 ♈ .8:32a 21 ♈ .10:12a 23 ♈ .9:40a 25 ♈ .9:31a 27 ♈ .10:50a 29 ♈ .3:36p	2 ♈ .0:12a 4 ♈ .11:51a 7 ♈ .0:33a 9 ♈ .0:57p 12 ♈ .0:18a 14 ♈ .9:59p 16 ♈ .4:25p 18 ♈ .7:40p 20 ♈ .8:26p 22 ♈ .8:04p 24 ♈ .8:44p 27 ♈ .0:03a 29 ♈ .7:21a 31 ♈ .6:13p	3 ♈ .7:12a 5 ♈ .7:18p 8 ♈ .6:24a 10 ♈ .3:22p 12 ♈ .10:26p 15 ♈ .3:03a 17 ♈ .5:22a 19 ♈ .6:10a 21 ♈ .7:11a 23 ♈ .10:00a 25 ♈ .3:54p 27 ♈ .1:48p 30 ♈ .2:04p
Changes ♈ 2.6:02p ♈ 9.4:09p ♈ 17.1:35p ♈ 25.6:42a	Changes ♈ 1.1:50a ♈ 8.7:52a ♈ 16.10:39a ♈ 23.7:06p	Changes ♈ 2.10:18a ♈ 10.0:49a ♈ 18.5:08a ♈ 25.5:10a ♈ 31.8:15p	Changes ♈ 8.5:57p ♈ 16.7:53p ♈ 23.1:29p ♈ 30.8:08a	Changes ♈ 8.10:24a ♈ 16.6:37a ♈ 22.9:00p ♈ 29.9:56p	Changes ♈ 7.1:31a ♈ 14.1:54p ♈ 21.4:46a ♈ 28.1:24p
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
3 ♈ .3:00a 5 ♈ .1:03p 7 ♈ .9:34p 10 ♈ .3:40a 12 ♈ .8:15a 14 ♈ .11:28a 16 ♈ .1:48p 18 ♈ .4:13p 20 ♈ .1:07a 23 ♈ .1:07a 25 ♈ .9:56a 27 ♈ .9:44p 30 ♈ .10:39a	1 ♈ .9:25p 4 ♈ .5:18a 6 ♈ .10:23a 8 ♈ .2:04p 10 ♈ .4:41p 12 ♈ .7:31p 14 ♈ .10:56p 17 ♈ .3:21a 19 ♈ .7:35p 21 ♈ .6:18p 24 ♈ .5:24a 26 ♈ .6:19p 29 ♈ .6:12a 31 ♈ .2:23p	2 ♈ .7:23p 4 ♈ .9:54p 6 ♈ .11:23p 9 ♈ .1:03a 11 ♈ .4:08a 13 ♈ .9:36a 15 ♈ .4:53p 18 ♈ .1:57a 19 ♈ .1:13p 23 ♈ .1:45a 25 ♈ .2:09p 27 ♈ .11:57p 30 ♈ .5:29a	2 ♈ .7:49a 4 ♈ .8:33a 6 ♈ .8:29a 8 ♈ .10:29a 10 ♈ .2:55p 12 ♈ .10:37p 15 ♈ .8:23a 17 ♈ .7:56p 20 ♈ .8:38a 22 ♈ .8:53p 25 ♈ .8:05a 27 ♈ .3:19p 29 ♈ .6:38p 31 ♈ .6:57p	2 ♈ .6:43p 4 ♈ .6:58p 6 ♈ .9:46p 9 ♈ .4:10a 11 ♈ .2:13p 14 ♈ .2:23a 16 ♈ .2:48p 19 ♈ .3:11a 21 ♈ .2:37p 23 ♈ .11:09p 26 ♈ .4:17a 28 ♈ .6:00a 30 ♈ .5:32a	2 ♈ .5:31a 4 ♈ .6:52a 6 ♈ .11:36a 8 ♈ .8:24p 11 ♈ .8:26a 13 ♈ .9:07p 16 ♈ .9:43a 18 ♈ .8:18p 21 ♈ .5:16a 23 ♈ .11:29a 25 ♈ .2:50p 27 ♈ .3:58p 29 ♈ .4:16p 31 ♈ .5:20p
Changes ♈ 16.2:56p ♈ 13.6:58p ♈ 20.1:43p ♈ 28.6:13a	Changes ♈ 5.2:31a ♈ 11.11:22p ♈ 19.0:35a ♈ 26.11:54p	Changes ♈ 3.0:34p ♈ 10.4:43a ♈ 17.1:51p ♈ 25.5:39p	Changes ♈ 2.9:44p ♈ 9.0:28p ♈ 17.5:43a ♈ 25.10:21a	Changes ♈ 1.6:56a ♈ 7.11:37p ♈ 15.11:51p ♈ 24.0:56a ♈ 30.4:55p	Changes ♈ 7.2:34p ♈ 15.7:07p ♈ 23.0:55p ♈ 30.4:04a

NOTE: TIME LISTINGS BELOW ARE MOUNTAIN STANDARD TIME.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
1 ♈ .9:41p 4 ♈ .0:43a 6 ♈ .3:19a 8 ♈ .7:15a 10 ♈ .0:07p 12 ♈ .8:03p 15 ♈ .6:37a 17 ♈ .7:27p 20 ♈ .7:21a 22 ♈ .4:11p 24 ♈ .9:49p 27 ♈ .1:05a 29 ♈ .3:18a 31 ♈ .5:52a	2 ♈ .9:14a 4 ♈ .2:04p 6 ♈ .8:09p 9 ♈ .4:38a 11 ♈ .3:13p 14 ♈ .3:24a 16 ♈ .4:08p 19 ♈ .1:59a 21 ♈ .8:24a 23 ♈ .10:50a 25 ♈ .11:52a 27 ♈ .0:57p	1 ♈ .3:08p 3 ♈ .7:42p 6 ♈ .2:27a 8 ♈ .11:35a 10 ♈ .10:30p 13 ♈ .10:51a 15 ♈ .11:45p 18 ♈ .0:44p 20 ♈ .6:03p 22 ♈ .9:27p 24 ♈ .10:16p 26 ♈ .9:57p 28 ♈ .10:36p 31 ♈ .1:32a	2 ♈ .7:54a 4 ♈ .5:35p 7 ♈ .5:00a 9 ♈ .5:25p 12 ♈ .6:12a 14 ♈ .5:53p 17 ♈ .2:57a 19 ♈ .7:32a 21 ♈ .9:12a 23 ♈ .8:40a 25 ♈ .8:31a 27 ♈ .9:50a 29 ♈ .2:36p	1 ♈ .11:12p 4 ♈ .10:51a 6 ♈ .11:33p 9 ♈ .11:57a 11 ♈ .11:18p 14 ♈ .8:59a 16 ♈ .3:25p 18 ♈ .6:40p 20 ♈ .7:26p 22 ♈ .7:04p 24 ♈ .7:44p 26 ♈ .11:03p 29 ♈ .6:21a 31 ♈ .5:13p	3 ♈ .6:12a 5 ♈ .6:18p 8 ♈ .5:24a 10 ♈ .2:22p 12 ♈ .9:26p 15 ♈ .2:03a 17 ♈ .4:22a 19 ♈ .5:10a 21 ♈ .6:11a 23 ♈ .9:00a 25 ♈ .2:54p 27 ♈ .0:48p 30 ♈ .1:04p
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NOTE: THESE TIME LISTINGS ARE CENTRAL STANDARD TIME.

NOTE: THESE TIME LISTINGS ARE MOUNTAIN STANDARD TIME.

TOBACCO

Packet 15c

HAVANA. Pure Cuban grown seed. When grown in this country commands a high price as cigar stock.

WHITE BURLEY. A variety grown for the manufacture of fine cut and plug.

TURNIPS

Packet 15c

PURPLE TOP WHITE GLOBE. An old favorite. Root large, quite round, white underground, and purple on the upper part for about one-half of the length of the root.

PURPLE TOP YELLOW RUTABAGA. The best variety of the Swedish turnip. It is hardy and productive, flesh is yellow, of solid texture, sweet and well flavored. Rutabaga requires more room and a longer period for its growth than the turnip.

SHOGGIN. A quick growing, dual purpose Turnip. Very popular in the South where it is grown both for the fine roots and the tops which are delicious as greens.

EXTRA EARLY PURPLE TOP MILAN. The earliest in cultivation. Very flat, medium size, with a bright purple top; leaves few, short, and light of color. The pure white flesh is of choicest quality, hard, solid, and fine grained. It is an excellent keeper.

EXTRA EARLY WHITE MILAN. Root small, very smooth, flat, entirely white, with a slender tap-root; leaves small and few, undivided, oval.

PURPLE TOP STRAP LEAVED. The standard for this part of the country. The root is small or medium sized, very flat, quite smooth, pure white on the underground part, and bright violet-red on the upper part.

HERBS

NO GARDEN IS COMPLETE WITHOUT A FEW HERBS

Anise
Balm
Borage (Gurkenkraut)
Caraway
Catnip or Catmint
Chervil, annual
Coriander, annual
Dandelion (Loewenzahn)
Dill,
Horehound
Hyssop
Lavender
Rosemary
Rue
Sage
Savory
Sorrel
Sweet Basil
Sweet Fennel
Sweet Marjoram
Sweet Thyme
Wormwood

All Herbs
15c Per Packet

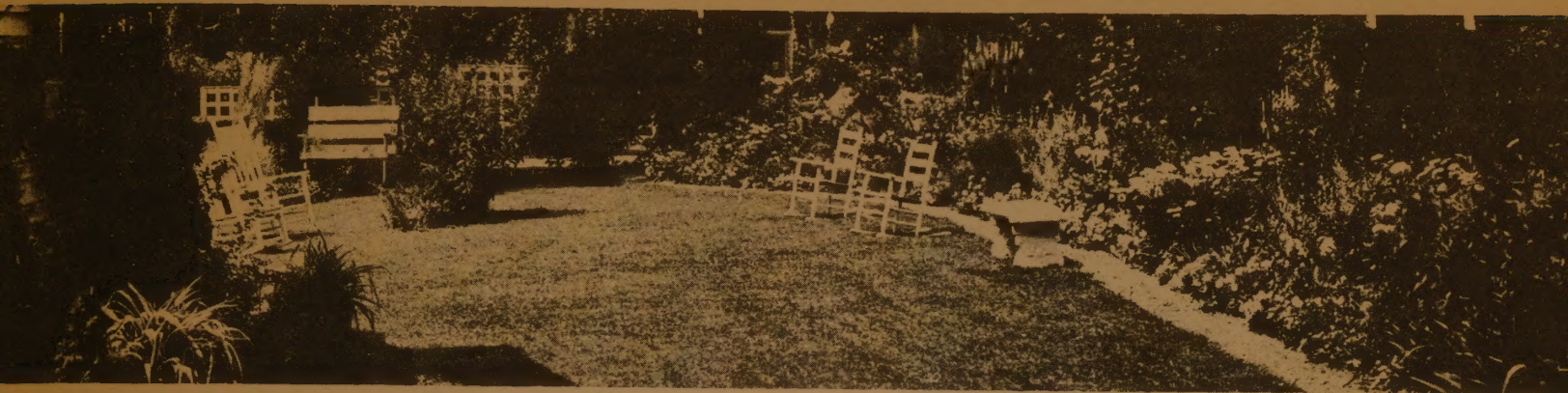
VEGETABLE GARDEN PLANTING GUIDE

		Seed Required Per 100 Feet or (P) Per 1,000 Plants or (H) Per 100 Hills	Seed Required Per Acre	Distance Between Rows	Distance Apart In Row	Depth To Plant In Inches
Asparagus.....	(P)	1 1/4 oz.	4 lbs.	2 ft.	5 in.	1
Beans, Bush.....		1 lb.	60 lbs.	2 ft.	3 in.	1 1/2
Beans, Pole.....	(H)	1 lb.	30 lbs.	3 ft.	4 ft.	1 1/2
Beets.....		2 oz.	10 lbs.	1 1/2 ft.	4 in.	1/2
Broccoli.....	(P)	1/2 oz.	4 oz.	2 ft.	2 ft.	1/2
Brussels Sprouts.....	(P)	1/3 oz.	4 oz.	2 ft.	18 in.	1/2
Cabbage.....	(P)	1/2 oz.	4 oz.	2 ft.	18 in.	1/2
Cantaloupe.....	(H)	2 oz.	3 lbs.	6 ft.	4 ft.	3/4
Carrot.....		1 oz.	4 lbs.	1 1/2 ft.	3 in.	1/2
Cauliflower.....	(P)	1/2 oz.	4 oz.	2 ft.	20 in.	1/2
Celery.....	(P)	1/6 oz.	4 oz.	2 1/2 ft.	6 in.	1/4
Chicory.....		1 oz.	4 lbs.	2 ft.	3 in.	1/2
Collards.....	(P)	1/2 oz.	4 oz.	2 ft.	20 in.	1/2
Corn, Sweet.....		1/2 lb.	12 lbs.	3 ft.	6 in.	1
Corn Salad.....		4 oz.	10 lbs.	1 1/2 ft.	3 in.	1/2
Cress, Curled.....		1 oz.	10 lbs.	1 1/2 ft.	3 in.	1/4
Cucumber.....	(H)	2 oz.	2 lbs.	6 ft.	4 ft.	1/2
Dill.....		1/2 oz.	5 lbs.	3 ft.	6 in.	1/2
Eggplant.....	(P)	1 oz.	4 oz.	2 ft.	24 in.	1/2
Endive.....		1/2 oz.	4 lbs.	2 ft.	12 in.	1/2
Kale.....		1/2 oz.	3 lbs.	2 ft.	18 in.	1/2
Kohlrabi.....		1/2 oz.	4 lbs.	1 1/2 ft.	5 in.	1/2
Leek.....		1 oz.	5 lbs.	1 1/2 ft.	3 in.	1/2
Lettuce.....		1/2 oz.	3 lbs.	1 1/2 ft.	8 in.	1/2
Mustard.....		1 oz.	4 lbs.	1 1/2 ft.	5 in.	1/2
Okra.....		2 oz.	8 lbs.	3 ft.	18 in.	1
Onion Seed.....		1 oz.	4 lbs.	1 1/2 ft.	3 in.	1/2
Onion Sets.....		2 lbs.	600 lbs.	1 1/2 ft.	3 in.	1
Parsley.....		1/2 oz.	3 lbs.	1 1/2 ft.	5 in.	1/2
Parsnip.....		1 oz.	4 lbs.	1 1/2 ft.	4 in.	1/2
Peas.....		2 lbs.	120 lbs.	2 ft.	2 in.	1 1/2
Pepper.....	(P)	1 oz.	3 oz.	2 ft.	2 ft.	1/2
Pumpkin.....	(H)	4 oz.	4 lbs.	6 ft.	6 ft.	1
Radish.....		1 oz.	10 lbs.	15 in.	1 in.	1/2
Rutabaga.....		1 oz.	2 lbs.	1 1/2 ft.	6 in.	1/2
Salsify.....		2 oz.	8 lbs.	2 ft.	4 in.	1/2
Spinach.....		2 oz.	20 lbs.	1 1/2 ft.	4 in.	1/2
Spinach, New Zealand.....		1 oz.	3 lbs.	1 1/2 ft.	4 in.	1
Squash, Bush.....	(H)	4 oz.	4 lbs.	5 ft.	5 ft.	1
Squash, Vine.....	(H)	7 oz.	2 lbs.	10 ft.	8 ft.	1
Tomato.....	(P)	1/2 oz.	4 oz.	3 ft.	3 1/2 ft.	1/2
Turnip.....		1 oz.	2 lbs.	1 1/2 ft.	4 in.	1/2
Watermelon.....	(H)	4 oz.	4 lbs.	10 ft.	8 ft.	3/4

Plant the **BEST - BARTELDES!**

FLOWERS

EASY TO GROW . . . PROVIDE CUT-FLOWERS . . . BEAUTIFY YOUR HOME



TRY THESE NEW ONES. THEY ARE REALLY WORTH WHILE.

RED SATIN PETUNIA

RED SATIN A-2

F1 Hybrid Petunia
All American Selection

Incredibly vivid, scarlet red that does not fade in the heat or sunshine. Plants 10 to 12 inches tall, globe shaped, bearing 30 or more blooms throughout the summer. Marvelous for borders. Pkt., 35c.



ORTHO POLKA ZINNIA A-1

Here is a really superior Zinnia. Flowers are broad, fully double and over 4 inches in diameter. Colors are extremely varied and include many beautiful variations and also solid colors on the same plant. The contrasting colors produce a startling effect. Plants vigorous and about 3 feet tall. Pkt., 25c.

PAMPAS PLUME COCKSCOMB A-1

Now comes the same quick-growing, heat-loving, pest-free plant in all the brilliant colors of autumn leaves; gold, copper, deep red, scarlet, henna and carmine. 30-inch plants bloom in approximately 75 days from seed. Pkt., 25c.



PEPPERMINT STICK ZINNIA A-1

A new development in striped Zinnias. Selected for a wide range of colors, including red and white, red and yellow, pink and white, orange and white, and purple and white. Flowers of medium size and bloom rather early. Pkt., 25c.

LIPSTICK PETUNIA A-2

So far as we know, the only new Petunia to have a poem written about it! This was just one of the extraordinary results of the widespread publicity given Lipstick in 1953 by enthusiastic garden clubs as well as professionals. An extremely uniform, vigorous Hybrid Nana Compacta with a glowing, warm carmine-rose color, Lipstick is a deeper and richer Celestial Rose, colorfast in hot sun. Plants are compact, 12 to 14 inches high, covered with 2½-inch flowers all summer. Pkt., 35c.



BLAZE ZINNIA

BLAZE ZINNIA A-1

All-American Winner for 1954. The most vivid of the Giant Hybrid Zinnias. Blaze bursts into bloom with a profusion of brilliant mandarin red flowers which soften to scarlet-orange. Plants are free bloomers from 28 to 32 inches tall. Pkt., 35c.

GOLDEN FLEECE COCKSCOMB A-1

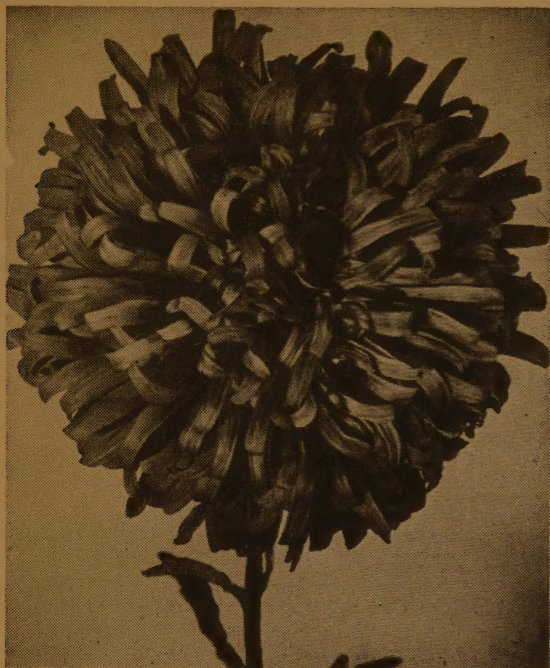
One of the most sensational annuals for a summer border or background. Thrives in hot weather and produces a multitude of high golden plumes. Pkt., 25c.

MARIGOLD, GLITTERS A-1

The All-America Bronze Medal Winner for 1951. Of the chrysanthemum-flowered type, bearing fluffy, canary-yellow flowers 3 inches across and more. Long, strong stems. The blooms are produced very freely from early summer until frost. Bushy, erect plants growing 3 feet tall. Makes a showy display in the garden and provides plenty of flowers for cutting. Thin plants to 2½ feet apart. Pkt., 25c.

FLOWERS

Everyone, even the newest novice, can grow flowers to beautify their home and to provide an abundance of cut flowers for the table.



FLOWERS

ALYSSUM A-1

(Height 6 to 12 inches.) This plant is used for borders, edgings, baskets, pots, rock-work and for cutting.

Dwarf (Carpet of Snow). Very small, with pretty white flowers. Blooms all summer and fall. Pkt., 15c.

Sweet Alyssum. Standard variety for borders, window boxes, masses, etc. It is of trailing habit, bearing many fragrant white flowers. Pkt., 15c.

AGERATUM MEXICANUM. A-1 Annual. (Height 12 inches.) The plants are bushy, erect, and produce clusters of pretty bush-like blue flowers throughout the season. They make fine borders. Pkt., 15c.

AMARANTHUS A-1

(2 to 5 feet.) These robust annuals are grown for the brilliantly colored foliage. They grow very tall and are very effective and showy garden plants, adapted for centers and backgrounds of flower beds.

Caudatus (Love Lies Bleeding). Has long drooping red spikes. Pkt., 15c.

Tricolor (Joseph's Coat). The inner foliage is black and bronze, tipped with green, and the outer foliage is bright red and yellow. Pkt., 15c.

Cruentus. Bears dark red feathery flowers. Very hardy. Pkt., 15c.

ANTIRRHINUM A-1 (Snapdragon). (Height 12 to 24 inches.) Flowers the first season. They are useful for cutting and keep fresh a long time. From seed sown in the open ground in May, plants will bloom in July and August and then continually until frost. Coral Red, Bright Red Color with White Throat. Pkt., 15c.

Queen of the North. Snow White. Pkt., 15c.

Tall Mixed. Pkt., 15c.

Dwarf Mixed. Pkt., 15c.

ASTERS A-1

The Aster is one of the most satisfactory of the annual flowering plants. It has a great variety of size and color and its season of bloom makes it valuable for cut flowers. The dwarf varieties lend themselves to close planting for cut flowers, while the tall varieties are well adapted where careless effects are desired.

Giant Aster. Their immense size, their beauty and their long, sturdy stems will give them the first place among Asters. Mixed colors, Pkt., 20c.

Giant Crego Aster. These flowers are of immense size and borne on long stems, have appearance of Chrysanthemums; 39 inches high and bear an abundance of flowers during August and September. Pink, White, Lavender, Blue, Red, Purple, Mixed. Pkt., 15c.

Flowers fall into three classifications, namely:

Annuals are plants that bloom the first season from seed sown that season. Zinnias is probably the most widely grown annual.

Annuals that reseed are almost as good as perennials. The seed blowing to different locations change the pattern of the garden from year to year. Since this seed can be scattered in the fall it saves time for the gardener when there are so many spring chores to do and very often these are up long before the gardener would have had time to plant them in the spring. Among these are Cleome, Larkspur, Cornflower, Balsam, Love-in-a-Mist, Salvia, Green Bells of Ireland, Celosia, Petunia (plain), Calendula, French Marigold, annual Phlox.

Biennials are plants that make a growth the first year but seldom bloom before the second year, and live only two years. Foxglove and Canterbury Bells are two good examples of this type plant.

Perennials are plants that live year after year if given the proper care. Can be grown from seed, multiplied by root division, and some by cuttings rooted in sand or vermiculite.

A—Annual. B—Biennial. P—Perennial. Culture 1, 2, 3, 4.

A-1 means Annual and Culture 1.

Culture 1: Annuals—Sow seed in flats inside for transplanting later, or outside after danger of frost. Seed may be sown where plants are to bloom and thinned to 18 to 24 inches (transplant the seedlings taken out), or it may or may not be planted in rows for easier care and transplanted later into flower border. Annuals should have sun at least half days.

Culture 2: Annuals that reseed, differ in different localities. May be planted in fall or early spring, as cold does not affect germination. All annuals can be planted over tulip and similar bulbs as their shallow root system will not be detrimental to the bulb. Annual plants can be used successfully to cover bulb foliage while curing.

Culture 3. Biennials can be planted in either open ground or the border and thinned. May be planted any time from late spring to early fall. Our dry summers may burn out the new plants unless protected and kept watered. The new plants should be mulched to prevent serious loss.

Culture 4: Perennials can be planted in cold frames any time and when the new plants are large enough, transplant to the flower border. New plants put out in the fall should be mulched the first winter. Plant perennial seed in open ground before August, so plants will have a better chance wintering over (with mulch). Some perennials do very well in shade. Columbine, Mertensia, Bleeding Heart and Violets are a few of these.

Color in Your Flower Garden While it is almost impossible to create a discordant color effect among flowers, you will probably wish to create your own color combinations.

If you like orange and yellow effects you might plant Calendula, Golden Gleam Nasturtium, Persian Carpet Zinnia, Golden Fleece Cockscomb, Yellow Flare Cosmos and Glitters Marigold.

Should you be partial to the delicate shadings of pinks, whites and blues, we suggest Carpet of Snow Alyssum, White Zinnia, Rosy Morn Petunia, Blue Boy Cornflower, Pink Zinnia, Blue Aster, Blue Delphinium and Pink Aster.



ASTER

ASTERS A-1—Continued

Quilled Aster. One of the popular Needle type and entirely distinct from other varieties. Pkt., 15c.

Comet or Branching Asters. A medium, tall variety, excellent for cutting, flowers very large, petals long, twisted and wavy, making a very graceful Chrysanthemum-like flower. Mixed colors. Pkt., 15c.

Good Mixed Asters. This splendid mixture is unequalled for an assortment of kinds and colors. Pkt., 15c.

BACHELOR'S BUTTON (Centaurea Cyanus). A-2. (2 feet.) Also called Cornflower, Ragged Sailor and Blue Bottle. Excellent for cutting. Reseeds itself so that it is practically perennial in habit. Pkt., 15c.

BALSAM (Lady Slipper). A-2 (Height, 2 feet.) The flowers are of brilliant colors and are produced in great profusion. Tender annuals, should be started indoors in April or sown outdoors in May. Double Mixed. Double White. Double Camellia-Flowered (fine.) Pkt., 15c.

BELLIS PERENNIS (Double Daisy). P-4. (6 inches.) The flowers are quilled and flat-petaled.

Longfellow. Pink. Pkt., 15c.

Snowball. White. Pkt., 15c.

Mixed. Pkt., 15c.

BRACHYCOME. A-1 (6 inches.) A delicate dwarf growing plant, suitable for growing in masses, edging and rustic baskets. Flowers are of blue, lilac and white with dark and white centers. Pkt., 15c.

BURNING BUSH or SUMMER CYPRESS (Kochia Trichophylla) A-1. Remains green all summer and turns deep red in the fall. Makes fine annual hedge. Pkt., 15c.

CAMPANULA MEDIA (Bell Flower). P-4. (1½ to 2 ft.) The fine bell-shaped flowers are large enough to attract attention by themselves. Pkt., 15c.



CALENDULA OFFICINALS (Pot Marigold) A-1. (18 inches.) This splendid variety has large, double flowers beautifully imbricated, resembling in form and size the finest asters. Of straw color it blooms profusely from July till frost. Pkt., 15c.

CALLIOPSIS (Tickseed). A-2. (2 feet.) One of the garden's great forces in yellow, strengthened with rich maroons and browns. Flowers from August until frost. Pkt., 15c.



CALENDULA

CANDYTUFT A-1

(1 foot.) Plants are about a foot high and very bushy. Various colors. The white flowers are very fragrant. Do not transplant well.

White. Pkt., 15c. Dwarf Tom Thumb, mixed. Pkt., 15c. Many Colors, mixed. Pkt., 15c.

CANNA. A-1. (3 feet.) Cannas are usually grown from bulbs but are very easily grown from seeds. Some fine varieties are developed by planting the seed. Pkt., 15c.

CARNATIONS A-1

(18 inches.) This beautiful and well known flower produces a finer bloom when grown from seed than grown from cuttings taken from old plants.

Marguerite Carnation. The most popular variety for the amateur. Flowers in a few weeks from the time of sowing and produces beautifully fringed and wonderfully fragrant flowers. Pkt., 15c.

CASTOR BEANS A-1

(6 to 10 feet.) A luxuriant expansive foliage plant, of tropical appearance. The stalks of the plants are brownish red, the leaves are very large.

Sanguineus. Large Red. Pkt., 15c.

Zanzibariensis. A giant variety introduced from New Zanzibar. Pkt., 15c.

CENTAUREA A-1

Centaurea Candidissima (Dusty Miller). 1½ to 2 feet.) Fine foliage plants for bedding, baskets, pots and borders. The leaves are silvery white. Pkt., 15c.

Centaurea Imperialis (Royal Sweet Sultan). The beautiful, sweet-scented flowers are borne on long stems and will keep a long while. Pkt., 15c.

CHRYSANTHEMUMS. Early Annual Chrysanthemum. A beautiful double variety of easy culture. If the plants are pinched back until July 15th they will be more branched. Pkt., 15c.

CLEOME (Rocky Mountain Bee Plant or Spider Plant). A-2. (3 feet.) Spikes of rose-pink flowers on long wiry stems resembling the spider. Hardy, and excellent for tall borders, since they reach a height of 3 to 4 feet. Pkt., 15c.

CORNFLOWER . . BLUE BOY A-1

A very attractive blue shade in this ever popular annual. Pkt., 15c.

When watering becomes necessary, be sure to do a thorough job. Water deep enough to get the moisture down to roots. If the moisture is just below the surface, the roots will come up to get it, making the plants shallow rooted and more susceptible to burning out. One of the most satisfactory ways of deep watering is by using a soil soaker.

For Rock Gardens you want low growing plants such as Alyssum, Dianthus or Pinks, Bellis, Violets, Portulaca, Ageratum and of course many, many dwarf growing perennials among which are Dwarf Iris, Coral Bell, Sedums, Bellis or English Daisy, and dwarf or rock garden types of Tulips.

COSMOS A-2

(3 to 5 feet.) A strong, tall growing annual. Most effective when planted in masses or background borders against fences.

Early Flowering. Mixed. Pkt., 15c.

Late Flowering. In white, Pink, Crimson, Yellow, and Mixed. Pkt., 15c.

Double or Crested Cosmos. These double crested flowers are of decided improvement over the single flowers and are just as easily grown. Pkt., 15c.

Orange Flare. Three feet tall, well branched. Showy, golden orange flowers in three months from seed. Pkt., 15c.

YELLOW FLARE. A-2. Flowers are single and produced in abundance. Flowers are about 2½ inches in diameter, of bright yellow color and beautiful in bouquets. Plants about 3 feet tall. Pkt., 15c.



COSMOS

COCKSCOMB A-1

(Celosia.) (2½ feet.) There are many colors and shapes, but the scarlet and crimson ones are the most brilliant and rich.

Dwarf Mixed. Pkt., 15c. Tall Mixed. Pkt., 15c.

Giant Empress Cockscomb. Flowers of enormous size. Pkt., 15c.

Feathered Cockscomb. Flowers look like graceful plumes of brilliant colors. Pkt., 15c.

COLEUS. The leaves are of many shades and colors and are of remarkable beauty. Pkt., 25c. House plant.

COLUMBINE P-4

(Aquilegia Coerulea.) (1½ to 2 feet.) The state flower of Colorado. The colors range from light to dark blue.

Mixed Columbine. Pkt., 15c.

Rocky Mountain Columbine. Blue. Pkt., 15c.

COREOPSIS (Lanceolata). P-4. (2 feet.) This is a rapid growing hardy perennial. The flowers are bright yellow; very attractive. Blooms the first year from seed. Pkt., 15c.

DAHLIA A-1

These well known flowers are commonly grown from the tubers but may also be grown from seed.

Single Mixed. Pkt., 15c.

Double Mixed. Pkt., 15c.



Columbine

DELPHINIUM HYBRIDUM P-4

(Perennial Larkspur)
(3 to 4 feet)

Seed sown early in the spring will bloom in August. Splendid for planting in hardy borders.

Delphinium Formosum. Dark blue. Pkt., 15c.

Delphinium Belladonna. Light blue. Pkt., 15c.

Mixed. All, pkt., 15c.

DIANTHUS PLUMARIUS. P-4. (1 foot.) The old fashioned June Clove or Grass Pinks. Hardy. Fine for rock gardens. Pkt., 15c.

ESCHSCHOLTZIA (California Poppy). A-1. (1 foot.) The state flower of California. Finely cut foliage and bloom from June until frost. Pkt., 15c.

EVERLASTING FLOWERS. A-1. (18 inches.) A fine mixture of the straw-flowered varieties. Will retain their color all winter. Pkt., 15c.

FEVERFEW (Matricaria Capensis) P-4. (3 feet.) A very free flowering border plant, bearing masses of white or yellow flowers. Pkt., 15c.

FORGET-ME-NOT (Myosotis Alpestris). P-4. (6 to 8 inches.) They grow best in moist soils. The flowers are blue. Should be given a slight protection in winter. Pkt., 15c.

FOUR O'CLOCK (Marvel of Peru or Mirabilis Jalapa). A-1. (3 feet.) It blooms during late summer and autumn, opening its flowers only late in the afternoon and on cloudy days. Pkt., 15c. Do not transplant well.

FOXGLOVE (Digitalis). P-4. (3 to 5 feet.) Flowers are of all colors, are bell or thimble-shaped, and borne in tall spikes. Hardy. Pkt., 15c.

FUCHSIA. House plant. A well known greenhouse plant, which will bloom from seed the first year if planted early. Pkt., 25c.

FIESTA COSMOS. A-1. All-American Silver Medal in 1952. Height 2½ feet. Flowers are bright gold with scarlet stripes and plants are quite bushy in shape. Flowers are semi-double, bloom quite early and throughout the summer. Fine for large borders and for cut flowers. Pkt., 25c.



GAILLARDIA

GAILLARDIA (Blanket Flower). P-4. (1½ feet.) A splendid showy perennial; very satisfactory as cut flowers. The stems are of good length, carry the flowers well. Pkt., 15c.

GLOBE AMARANTH (Gomphrena Globosa). A-1. (10 inches.) A good bedding plant. The flowers resemble clover blossoms, are of purplish-red, white and striped colors. Pkt., 15c.

GREEN BELLS OF IRELAND, A-1. A most interesting plant, producing green bell-like flowers that make beautiful winter bouquets. Pkt., 25c.

GYPSOPHILA A-1

(1 foot.) Small white and pink fairy-like flowers, borne on long, feathery stems. Blooms from first of July till frost.

Elegans Pink. This delicate rose-pink flower makes a beautiful border. Pkt., 15c.

HELIANTHUS or SUNFLOWER A-1

(3 to 5 feet.) These new ornamental sunflowers are excellent for garden planting for screening unsightly places and also for bouquets.

Helianthus Globosus (Double). Flowers are large, double and of rich saffron color. Pkt., 15c.

RED SUNFLOWER. Horticulturists have been trying for years to get a Red Sunflower. They have now come very near it, red flowers tipped with yellow. This is a decided novelty and will please you. Pkt., 15c.

HELICHRYSUM MONSTROSUM. (18 inches). Good shape, size and of desirable colors—yellow, sulphur, cream, white, pink, rose, and crimson. Bloom from July until destroyed by frosts. Pkt., 15c.

HELIOTROPE. House plant. Highly valued for the blue color and fragrance of the clusters of small saucer-shaped flowers. Can also be sown outdoors in May. Pkt., 15c.

HOLLYHOCKS. P-4. (5 feet.) They require a deep rich soil. Hardy, double. Pkt., 15c.

ICELAND POPPY (Papaver Nudicaule). P-4. (1½ feet.) Dwarf neat habit, forming a tuft of bluish green fern-like foliage. Blooms all summer. Pkt., 15c.

ICE PLANT (Mesembryanthemum Crystallinum). A-1. (6 inches.) A dwarf plant of trailing habit. The surface of the foliage is covered with particles resembling crystals of ice glistening in the sun. Pkt., 15c.

JOB'S TEARS (Colx Lachrymae). A-1. (3 feet.) Curious ornamental grass from East Indies, with broad, corn-like leaves and seeds of a light slate color. Beads are sometimes strung from the seeds. Pkt., 15c.

Growing Flowers in the Shade is always a problem. For total shade it is best to stick to such perennials as ferns, Lily of the Valley, Funkias, etc. But if you have only partial shade we suggest Columbine, Dwarf Phlox, Pansy, Violets, California Poppy, Godetian Sweet Alyssum and Sweet William.

LANTANA P-4. Shrubbery plant producing clusters of flowers which constantly change their color. May be grown in pots or set out in summer. They have an agreeable aromatic perfume. House plant. Pkt., 15c.

LARKSPUR (Delphinium Ajacis Annual). A-2 (2 to 3 feet.) The annual varieties include the rocket hyacinth-flowered larkspurs, so called from their long, narrow flower spikes.

Tall Mixed, Dwarf Mixed. Pkt., 15c.

LINUM GRANDIFLORUM RUBRUM (Scarlet Flax). A-1 (18 inches.) The flowers are deep crimson with black centers and saucer-shaped. Pkt., 15c.

LOBELIA. A-1. (6 inches.) Make a neat and effective edging for geraniums and ornamental leaved plants; pretty for baskets and vases and porch boxes. Colors are deep blue and blue marked with white. Pkt., 15c.



MARIGOLD—YELLOW SUPREME

MARIGOLD A-1

Bears a profusion of flowers of brilliant shades of yellow marked with maroon and brown. They are about 1½ inches in diameter.

Yellow Supreme. Large flower of rich lemon yellow color. Sweet scented. Plants vigorous and foliage has very little of Marigold odor. Pkt., 15c.

Dwarf Double French. Pkt., 15c.

Guinea Gold. Produces a compact plant literally covered with blossoms often measuring 2½ inches across that somewhat resemble a large carnation. The color is a brilliant golden orange, and quite free from the usual Marigold odor. Height 2 feet. Pkt., 15c.

Tall Double African. Pkt., 15c.

Tall Orange Prince. A new Marigold. Bears enormous orange-colored flowers of the quilled type. It is hardy, a free bloomer and a most satisfactory variety. Pkt., 15c.

MIGNONETTE A-1

(1 foot.) Fragrant blossoms continuously through the summer and until after severe frosts. This can also be grown in pots for winter flowering.

Sweet Grandiflora. Large flowering, very fragrant. Pkt., 15c.

Golden Queen. Golden yellow color. Pkt., 15c.

MOURNING BRIDE (Scabiosa Atropurpurea). A-1. (18 inches.) These hardy annuals show a great variation of color, and the long stems and keeping qualities of the blossoms make this one of the best annuals for bouquets. Pkt., 15c.



Golden Gleam Nasturtiums

NASTURTIIUMS A-1

Scarlet Gleam. Dazzling in color, delightfully sweet scented, Superior in type, extra large double flowered. Pkt., 15c. oz., 25c.

Gleam Hybrids. New double sweet-scented Nasturtiums. The flowers are large and practically 100% double. The color ranges from cream yellow to scarlet and deep maroon, with some spotted varieties. Pkt., 15c. oz., 25c.

Golden Gleam. Flowers are large, double, sweet-scented, of brilliant golden yellow, and borne on large stems well above the bright green foliage of the dwarf, bushy plants. Pkt., 15c. oz., 25c.

Tall Nasturtiums. (Average height 5 feet.) Besides their ordinary garden use for trailing over fences, trellises, stone walls, etc., the climbing nasturtiums can also be grown as pot plants for winter-flowering, hanging baskets and vases. Tall Mixed, All Colors, Pkt., 15c. oz., 20c; ¼ lb., 70c.

Dwarf Nasturtiums. (1 foot.) These plants have a neat, compact habit of growth and attractive foliage, and are excellent for borders. They bloom constantly throughout the season. Dwarf Mixed, Pkt., 15c. oz., 20c.

NICOTIANA AFFINIS A-1

(2½ to 3 feet.) Belongs to the tobacco family. Plants are in full flower every sunny day from June until frost. Blossoms trumpet shaped, on tall stems in colors of blue, red, and rose. Pkt., 15c.

Nicotiana Sanderae. (2 feet.) A lovely hybrid of elegant branching habit, bearing rosy flowers on long graceful stems. Pkt., 15c.

NIGELLA DAMASCENA (Love-in-a-Mist or Devil-in-the-Bush. (2½ feet.) Plants are compact, with fine cut foliage, which blooms profusely. Colors are blue and white. Pkt., 15c.

ORIENTAL POPPY (Papaver Orientale. P-4. 2 to 3 feet.) Unequaled for brilliancy of color. The flowers are of enormous size, often 6 inches in diameter and the colors range from soft pink to dazzling scarlet to deep maroon. Pkt., 15c.

Perhaps You Need a Garden of Annuals for Cut Flowers Only and Not Part of Your Landscaping

This garden should include Snapdragon, Calendula, Sweet Sultan, Chrysanthemum, Cosmos, Calliopsis, Larkspur, Gailardia, Eschscholtzia, Gypsophila, Nigella, Marigold and plenty of Zinnias.

OR if you do not have room for a cut flower garden, you can always plant a few rows along side of your vegetable garden, or in between your rows of early vegetables such as lettuce and radish. Let the flower plants stand after you have gathered the vegetables and you will have an abundance of cut flowers.



Petunia

PETUNIAS A-2

Annual. All of the single-flowered varieties of Petunias can be easily grown from seed. They are attractive in beds and masses, serve well for broad borders or bands, and thrive in window boxes.

FIRE CHIEF. An All-American selection that rocketed to public acceptance the first season. Bright red flowers on stocky, compact plants. Blooms all summer and into autumn. Best color is obtained in cool weather and in full sun. Pkt., 30c.

COMANCHE. Winner of All-American Medal for 1953. Winner of All-American Bronze Medal for 1953. Has the glowing red of Fire Chief with the extra vigor of F-1 Hybrids. Plants are compact, about 15 inches high and 18 inches in spread. Bloom freely all summer. Pkt., 35c.

Rosy Morn. Very beautiful rose color. Pkt., 15c.

Pink Glory. Pure flame rose pink. Flowers slightly ruffled. Pkt., 25c.

Royal Purple. Ruffled flowers of rich velvety purple. Pkt., 25c.

Single. Mixed. Pkt., 15c.

Giants of California. Produce immense blossoms. Pkt., 30c.

Striped and Blotched. Mixed. Pkt., 15c.

PHLOX DRUMMONDI GRANDIFLORE A-1

(1 foot.) The Phlox Drummondii is sometimes called the flame flower. Very easily grown, gives a quick return of bloom and offer a large variety to choose from. Mixed. Pkt., 15c

Mixed. Pkt., 15c.

Phlox Alba. White. Pkt., 15c.

Phlox, Star or Quedlinburg. Flowers are star-shaped and very attractive. Pkt., 15c.

PERENNIAL PHLOX. P-4. For permanent beds in the garden, and borders. Bear immense flowers. Pkt., 15c.



PANSIES A-1

Barteldes Giant Market Pansies. This strain is the result of many years of careful breeding and selection. Flowers are of immense size, and very rich coloring. Plants bear an abundance of giant blossoms. Pkt., 15c.

Trimardeaux Giant Mixed. Pkt., 15c. ¼ oz., \$1.00.

Good Mixed. A very good strain of all colors. Excellent for bedding. Pkt., 15c. ¼ oz., 80c.

PINKS A-1

(Dianthus)

(1 foot.) A popular class of flowers which should be used more generally in garden culture. Blooms constantly from July until frost and if covered, will bloom again second season.

Chinensis (Double China). Mixed. Pkt., 15c.

Lacinatus (Double Imperial.) Mixed. Pkt., 15c.

POPPIES A-1

They bear so profusely and are of such brilliant colors that they are especially valuable for mass planting. The annuals should be planted early in the spring and not transplanted.

Single and Double Poppies. Mixed. A fine collection of all the best annual varieties. Plant these in a mass or row and you will get a beautiful effect. Pkt., 15c.

Shirley Poppy. The flowers range from pure white to maroon with all intermediate shadings. Of easy culture and free bloomers. Pkt., 15c.

A Narrow Strip Along a Driveway

can be handled in several ways. A low effect may be had by planting Petunias, Portulaca and Sweet Alyssum, or just Petunias and Sweet Alyssum. Or you can get a hedge-like effect by using Kochia or Burning Bush, Four O'Clock, Zinnias or Marigold.

Get the Children Interested in a small Flower Garden. Start with the most easily grown annuals such as Zinnias, Marigolds, Nasturtiums, Cornflower and Morning Glory.

PORTULACA A-2

(Moss Rose or Sun Plant)

These trailing plants love the sun and stay close to the soil. Round flat flowers with vivid shades of red, yellow, pink, and white. Fine for massing in beds, edging and rockwork.

Single Mixed. Pkt., 15c. **Double Mixed.** Pkt., 15c.

PYRETHRUM AUREUM. A-1. A beautiful bedding plant with golden leaves, called Golden Feather. Pkt., 15c.

PYRETHRUM ROSEUM (Insect Powder Plant). P-4. (2 feet.) Hardy, heraceous garden plants with large single or double flowers. The colors are rose, pink, white, and crimson. Pkt., 15c.

SALPIGLOSSIS. A-1. These are very showy bedding or border plants with richly colored funnel-shaped flowers which are borne on long, graceful stems. The flowers are of purple-scarlet, yellow and blue. Pkt., 15c.

SALVIA SPLENDENS. One of the most popular of bedding plants. The brilliant red flowers make a wonderful show especially when in groups. Plants are from 2½ to 3 feet tall. Bloom in late summer.

SCHIZANTHUS. A-1. (18 inches.) Flowers are dainty, often called the Butterfly Flower. They come into bloom very quickly and are splendid for borders, gardens, and also for cut flowers. Pkt., 15c.

SHASTA DAISY. P-4. (15 to 18 inches.) Fine when planted in the old fashioned garden, and valuable as a cut flower. Pkt., 15c.

STOKESIA CYANIA (Cornflower Aster). P-4. (1½ to 2 feet.) Flower freely from early July until frost. The flowers resemble the cornflower in shape but are much larger and of a beautiful lavender-blue color. Pkt., 15c.



SALPIGLOSSIS



COREOPSIS



PORTULACA

ZINNIA A-1

The Middle West's Most Satisfactory Flower.

Cactus Flowered Zinnia. Plants up to 3 feet tall with flowers up to 6 inches in diameter. Flowers are unique in that some petals are flat, some are twisted and some are fluted, making for very attractive flowers. Colors are the lovely pastel shades. Pkt., 25c.

Persian Carpet Zinnia. Received All-American Honorable Mention in 1952. Flowers are dahlia shaped with pointed petals tipped with contrasting colors. Colors are deep, rich yellows, oranges, reds, crimsons, maroons, and pinks in most beautiful patterns. Persian Carpet fits most appropriately. Pkt., 25c.

Fantasy. Award of Merit in the All-American Flower Selections for 1935. The medium size chrysanthemum-like flowers are composed of shaggy rag-like petals that are borne on long stems. They come only in mixtures, but cover a wide range of color from the brightest red and orange to the popular pastel shades of pink and cream. Height 2 feet. Pkt., 15c.

Zebra Zinnia. Striped. Like Zebra and very attractive. Pkt., 15c.

Dahlia Flowered Zinnia. This is a new giant flowered type, the petals overlapping in such a manner as to give the blossoms the appearance of a decorative dahlia. The colors of this type are not so brilliant as the others, but are soft shades of lavender, rose and old gold. Red, yellow, white, pink or mixed. Pkt., 15c.

Pompon or Miniature Zinnia. A dainty and ornamental Zinnia which is very useful for borders. They come in all beautiful shades of coloring of the tall Zinnias and the flowers are just as perfect in form. Pkt., 15c.

Colossal Mixed Zinnia. Flowers of enormous size, up to 5 and 6 inches in diameter and quite flat. A mixture of beautiful pastel colors. Pkt. 15c.

SWEET PEAS—Annual A-1

Plant Sweet Peas Early

Little Sweetheart Sweet Pea

An entirely new type of Sweet Pea. Each plant makes a perfect mound of flowers about 7 inches high and 7 inches wide. Flowers are large and ruffled, and bloom early and for a long period. Wonderful for borders and bedding. Pkt., 35c.

Mixed Early Flowering Spencer Sweet Peas. The blooms are large, waved and ruffled, giving them a very attractive and distinct appearance. These are in bloom three weeks before the Standard Spencers, and they still have the same long stems and large flowers and long season of bloom. Pkt., 15c; oz., 30c; ¼ lb., 75c.

Late Flowering Spencer Sweet Peas. A splendid mixture of the best Spencer variety. They have long, strong stems with blooms of ruffled and waved flowers that appear almost double. Pkt., 15c; oz., 25c; ¼ lb., 55c.



GIANT HYBRID ZINNIAS

Giant Hybrid Zinnias. The loveliest Zinnias ever known—immense, ruffled flowers 6 inches in diameter, with graceful curved petals. Entirely free of the stiffness often associated with Zinnias. Airy, informal and in a wonderful color range. Strong plants 3 feet tall; very free blooming. Desirable for garden use and for cutting. Thin plants to 2½ feet apart. Pkt., 25c.

Peppermint Stick Zinnia. A new development in striped Zinnias. Selected for a wide range of colors, including red and white, red and yellow, pink and white, orange and white, and purple and white. Flowers of medium size and bloom rather early. Pkt., 25c.

Dahlia-Flowered Zinnia—Canary Bird. Large flowers of rich, canary yellow. Makes a beautiful bouquet with lavender or purple flowers. Pkt., 15c.

SWEET ROCKET. A-1. Very hardy and make fine display in borders. Will stand partial shade. Flowers resemble perennial Phlox. Pkt., 15c.

SWEET SULTAN (Centaurea Moschata). A-1. (2 feet.) The flowers are exquisitely fringed, 3 to 4 inches across, borne on long stems and are very fragrant. In bloom from July until October. Pkt., 15c.

SWEET WILLIAM (Dianthus Barbatus). P-4. (1 foot.) It does not flower until the second year from seed; commences blooming in early summer and continues to flower for several weeks. Pkt., 15c.

TEN-WEEKS STOCKS (Cut and Come Again). Cheiranthus Mattiola). A-2. (1 to 2 feet) The flowers look like small rosettes, appear on long stalks, are exceedingly fragrant, and are of all colors. Pkt., 15c.

VERBENAS. A-1. One of the most popular bedding annuals. The flowers are of very bright colors produced from June until frost. Pkt., 15c.

VINCA (Periwinkle or Old Maid). P-4. (1 foot.) Glossy green leaves, red and white flowers. Flowers from seed the first season and if taken into the house before frost will bloom all winter. Pkt., 15c.

VIOLET. P-4. (5 inches.) They bloom sooner than most other flowers and their fragrance is delightful. They will thrive in shady places. A violet bed around the foot of a big tree is very attractive. Pkt., 15c.

WALLFLOWER. P-4. The coloring runs mainly to rich yellow, orange and purple, and is oriental in effect. Fine for indoor culture. Double, Pkt., 15c; Single, Pkt., 15c.

TORCH . . . TITHONIA. A-1. All-American Winner for 1951. Easy to grow as Zinnias. Early. Will yield brilliant orange-scarlet cut-flowers all summer until frost. The flowers resemble single dahlias with bright gold centers. Plants are compact, waist to shoulder high, with soft green foliage. Perform best if planted in full sun, water sparingly and fertilized very little, if at all. Pkt., 20c.

Mulching With Peat Moss or similar material is a wonderful moisture and time saver.

Peat Moss loosens up the soil and holds moisture, but equally important is that it not only keeps down weeds but makes it much easier to pull the weeds. It's wonderful for rock gardens.

Try it and you'll be delighted.

CLIMBERS

It is best to not transplant these.

ANNUAL CLIMBERS—Mixed. A splendid mixture of pretty flowering, climbing annuals. Pkt., 15c.

BALSAM APPLE and PEAR. Annual. Curiously shaped golden yellow fruit which opens when ripe and shows the seed. Either Apple or Pear. Pkt., 15c.

CANARY BIRD FLOWER (*Tropaeolum Canariense*). Annual. Well known climbing annual with elegantly fringed bright yellow flowers. Pkt., 15c.

CARDINAL CLIMBER. Annual. Has beautiful fern-like leaves and is covered from mid-summer to frost with brilliant, fiery red flowers. Pkt., 15c.

CLEMATIS. Perennial. Usually grown from roots, but can also be started from seed. Pkt., 15c.

CLIMBING BLACK-EYED SUSAN (*Thunbergi Alatum*). Annual. (4 feet.) Beautiful tree flowering tender annual twiner of rapid growth. Flowers are buff, white, and orange. Pkt., 15c.

CONVOLVULUS (Morning Glory)

Tall Morning Glory (*Convolvulus Major*). (Annual.) (10 feet.) It soon covers a fence or trellis with abundant foliage and bright flowers. Pkt., 15c.

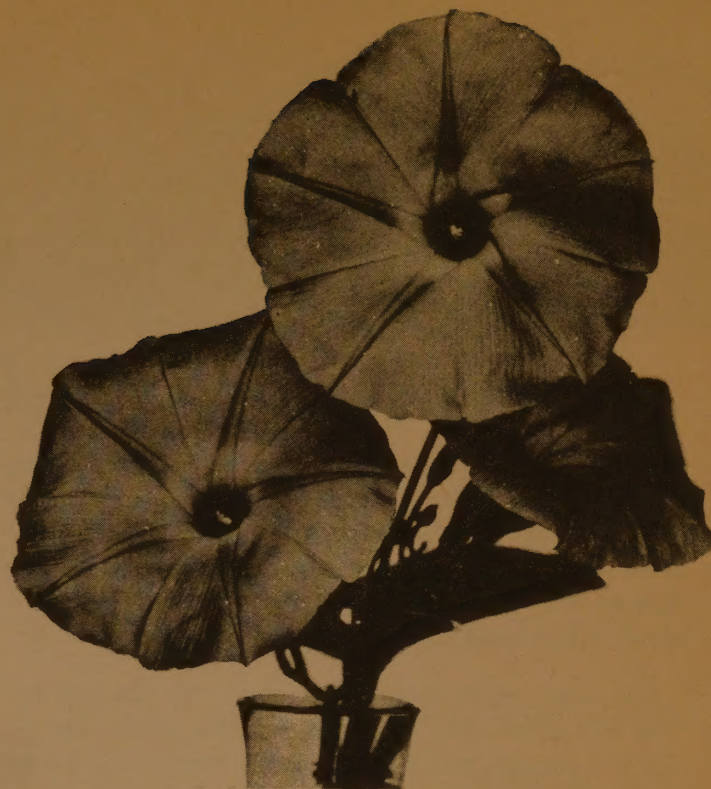
Dwarf Morning Glory. (Annual.) The flowers are of rich shades of blue rivaling the pansy for beauty. Blossoms from July until frost. Pkt., 15c.

Mammoth Blue Morning Glory. (Annual.) Beautiful large blue flowers which make a wonderful display when in bloom. Pkt., 15c.

Scarlet O'Hara. Large soft scarlet flowers borne in great profusion. Flowers remain open longer than most morning glories. Pkt., 15c.



Morning Glory



MOON FLOWER

CYPRESS VINE (*Ipomoea Quamoclit*). Annual. (15 feet.) Very delicate fern-like foliage, and masses of beautiful small star-shaped flowers. Pkt., 15c.

EVERLASTING SWEET PEA. Perennial. A perennial climber producing a succession of white, rose, and purple blossoms. Pkt., 15c.

HYACINTH BEAN (*Dolichos Lablab*). Annual. (Usual height 10 to 20 feet.) Splendid climbers with abundant cluster spikes of purple and white flowers. Pkt., 15c.

KUDZU VINE (*Pueraria Thunbergiana*). Perennial. The most rapid growing plant we have ever seen. Leaves resemble those of a lima bean and the foliage is very dense. Pkt., 15c.

MOONFLOWER (*Ipomoea Mexicana*). Annual. Beautiful waxy flowers open at night and on cloudy days, and their fragrance is delightful. Either white flowered or blue flowered. Pkt., 15c.

PASSION FLOWER (*Passiflora Coerulea*). Annual. Attractive purplish blue flowers, blooming profusely for several months. A native of tropical South America where it climbs from tree to tree. Pkt., 15c.

GOURDS

Annual. (10 to 20 feet.) Rapid growing, interesting annual climbing plants with ornamental foliage and curiously shaped fruit.

Dipper. A round gourd with a long neck, making an excellent dipper. Pkt., 15c.

Nest Egg. White, egg-shaped. Pkt., 15c.

Sugar Trough. Thick shell makes fine dishes. Pkt., 15c.

Dish Rag. When shelled and seeds removed, inside makes a good dish cloth or bath sponge. Pkt., 15c.

Hercules Club (Also called New Guinea Bean. The fruit is a long club-shaped gourd. Pkt., 15c.

Calabash Pipe. A rapid growing climber from South Africa. The calabash pipes are made from this fruit. Pkt., 15c.

Mixed Gourds. All kinds mixed. Pkt., 15c.



ALFALFA

ALFALFA. Unsurpassed tame hay crop. Puts nitrogen in the soil, especially if inoculated. Some say Alfalfa tea helps arthritis. Now the main source of supply for chlorophyll. What a plant. But we don't recommend that it be planted with grass in pastures, because of the danger of bloating live stock.

The best seed is always the cheapest in the long run. You can always rely on our "Sunflower Brand" shipped out of Lawrence and our "Columbine Brand" shipped out of Denver. They're tops. Your dealer can get them for you.

Sow the variety or type that is best suited to your own local conditions but be sure the seed is free of Dodder, Russian Thistle and other noxious weed seeds.

KANSAS COMMON ALFALFA. In buying Alfalfa seed be sure that you get seed which is adapted to your climatic condition. We recommend Kansas Grown seed for the Middle West with Oklahoma Seed and Utah Seed for second choice. Our best grade of Alfalfa Seed are Kansas grown and Oklahoma grown.

COLORADO COMMON ALFALFA. Grown in Colorado and adapted to Colorado climate. We suggest this as first choice for seeding in Colorado.

CERTIFIED BUFFALO ALFALFA. Recommended very highly for the Middle West.

Buffalo and Ranger are new wilt-resistant varieties. We also have Lahotan, Grimm, Meeker Baltic, Ladak, Atlantic, Vernal, Nebraska, Hardistan and Nomad, the dry land, spreading type.

CLOVERS

WHITE BLOSSOM SWEET CLOVER (*Melilotus alba*.) A biennial, grows to a height of from 4 to 6 feet, vigorous grower, extremely hardy and produces abundant pasturage and lots of hay. This is the standard Sweet Clover of the country.

BIENNIAL YELLOW BLOSSOM SWEET CLOVER (*Melilotus officinalis*.) This is also a biennial, about two weeks earlier than the white, but not quite as tall. Do not confuse this with the annual Yellow Blossom which is of very little value.

HUBAM CLOVER. Annual White Blossom that produces an abundance of hay or green manure the first year.

MADRID SWEET CLOVER. An improved variety of biennial Yellow Blossom Sweet Clover. Produces heavier yields and more valuable hay than Common Yellow Blossom.

RED CLOVER (*Trifolium Pratensis*.) Be careful to select seed which does not contain Buckthorn. You can depend on our Sunflower and Columbine brands of Red Clover.

WHITE CLOVER (*Trifolium Repens*.) A hardy perennial, excellent for mixing with Kentucky Blue Grass for lawns and pasture.

ALSIKE CLOVER (*Trifolium Hybridum*.) Especially valuable for growing on wet or swampy land.

STRAWBERRY CLOVER. A clover that is becoming very popular for use on alkali ground. It makes excellent pasture for live stock and will thrive, when once established, in very wet ground. It will even grow right under water. Five or six pounds will seed an acre.

KOREAN LESPEDEZA

It has an advantage over alfalfa and sweet clover, in that it will grow on untreated soil, no lime or phosphate being needed. Korean Lespedeza can be grazed all spring and summer and hay can be cut or seed taken from the crop in the fall. Sow 10 to 15 lbs. hulled seed per acre.

BIRDSFOOT TREFOIL. Used in pastures. A little slow to get established, but will not bloat live stock. Well recommended because of this.

HYBRID MILOS. These have definitely proved their superiority over the open pollinated varieties and will soon be as popular as is Hybrid Seed Corn.

SEE SPECIAL PRICE LIST ON FARM SEEDS

LADINO CLOVER

This is a perennial that is presumed to be a large form of White Dutch Clover. It is a low growing leafy plant with succulent and somewhat coarse stems that have a tendency to remain rather close to the ground. It is splendid for pasture and makes a good hay crop but is not suitable for lawns. Sow 2 to 4 lbs. per acre.

Be sure to inoculate Alfalfa and all clovers with

NITRAGIN

New Nitragin with CXL additive is now placed with higher moisture content for longer bacteria life. This assures over 50% higher bacteria count—guaranteed. Also it is lighter and finer which makes for more thorough coating of the seed—whether applied wet or dry.



HAY, PASTURE AND RANGE GRASS SEEDS

BROME, Smooth. A long-lived perennial which spreads by under ground root stalks, forming a dense sod. Highly palatable. Does well up to 9300 elevation. Should be in all irrigated pastures and does fairly well on dry land. Will form a good sod for ditch banks. Lincoln Brome yields more than common Brome. Sow 20 pounds per acre on irrigated ground; 10 pounds on dry land. Fertilize Brome with Ammonium Nitrate.

BROME, Mountain. Short-lived perennial bunch grass. Starts early in spring and stays green late in fall. Has excellent reseeding habits. Does well in timberlands. Sow 20 pounds per acre.

ACHENBACHER BROME. A selection by Kansas Experimental Station. This and Lincoln Brome produce more hay and pasture than Canadian Brome.

LINCOLN BROME. Smooth Brome selected by Nebraska Experimental Station for its abundance of foliage.

CRESTED WHEAT. The leading dry land grass in the northern section of the West. Crested Wheat Grass is a long-lived perennial of the bunch grass type but tillers profusely. It also does well when irrigated, grows in both light sandy loams and heavy clay soils. Best results, however, are obtained on soils of medium texture. Crested is slightly tolerant to Alkali. It does well up to 8,000 feet elevation and late reports are showing that it is doing good down in Texas. Crested Wheat is palatable to live stock. If cut for hay, it should be cut shortly after heading of just after blooming but before seeds have formed. Sow 6 to 8 pounds per acre in late fall or early spring at a depth of $\frac{3}{4}$ to 1 inch. Crested Wheat furnishes early and late grazing.

CRESTED WHEAT GRASS. Fairway Strain. Grows shorter than the Standard strain, has more and finer leaves and produces about the same amount of hay. Can be used for lawns in dry sections.

INTERMEDIATE WHEAT GRASS. A tall bluish-green sod forming perennial grass that produces a heavy growth of basal leaves. Growth starts early in the spring, and continues on into the summer; greens up in fall after short dormant period. Highly nutritious. Does well on dry land and under irrigation. Drill seed $\frac{1}{2}$ to $\frac{3}{4}$ inch deep in heavy soils and $1\frac{1}{2}$ inches deep in sandy land. Plant 7 to 10 pounds per acre for solid stands, and 4 pounds per acre for seed production in 40 inch rows.

SLENDER WHEAT GRASS (*Agropyrum tenerum*.) Another good perennial with drought-resisting habits. Produces $1\frac{1}{2}$ tons of hay per acre, which is well liked by livestock.

PUBESCENT or STIFF HAIR WHEAT GRASS. An excellent drought resistant wheat grass. Grows taller than Crested and stands more dry weather than Intermediate. Sow 8 to 10 pounds per acre.

BLUE GRAMA GRASS. Valuable for reseeding ranges. Resistant to over grazing. Sow 12 pounds per acre in March or April not to exceed $\frac{3}{4}$ to 1 inch deep.

NATIVE RYE GRASS. A quick growing grass, half annual and half perennial. Excellent for lawns when used with Kentucky Blue Grass, as it grows fast and protects the blue grass. Sow 30 per cent native rye and 70 per cent blue grass.

MEADOW FESCUE or ENGLISH BLUE GRASS (*Festuca Pratensis*.) Especially adapted for permanent pasture. Succeeds on poor soils, makes good hay earlier than other varieties, cattle thrive on it whether in dry or green state. Withstands dry weather and freezing, and produces an abundant crop of seed. Sow 15 to 20 pounds to the acre.

ORCHARD GRASS (*Dactylis Glomerata*.) Withstands droughts, grows well in the shade, flourishes in wet or poor ground. Good pasture for cows. Sow 20 to 25 pounds per acre.

RED TOP GRASS. One of our best native grasses. Especially valuable for sowing on sour or acid soils, swampy or meadow lands, liable to overflow, and on soils that are not rich enough for Timothy and other grasses. Mixed with Alsike Clover makes fine crop of hay or excellent pasture. Fourteen pounds of solid seed to the acre. Should be cut when in full flower. More easily cured than any other grass.

REED CANARY GRASS. A perennial that will do well in very moist places. Makes good hay and pasture. Sow six pounds per acre. Smothers out weeds.

SAND DROP SEED. A native dry land grass, good for binding soil and very palatable. Seed is very small and inexpensive. Plant 2 to 3 pounds per acre.

SAND LOVE GRASS. A lush growing, fine stemmed, medium tall bunch grass which produces a high yield of excellent forage. A real beef producer; adapted to most sandy areas in the Great Plains region. Plant 1 to 2 pounds per acre, preferably in the spring. Advisable to mix with Grama where patches of heavy soils are apparent.

SUDAN. Used for hay and temporary pasture. Plant 20 to 30 pounds on dry land and 40 to 50 pounds on irrigated. Sweet Sudan has sweeter stalk and is more palatable to livestock. Sudan that has been frosted or damaged by drought or that contains cane-hybrids is dangerous to stock on pasture.

SWEET SUDAN. This was produced by crossing standard Sudan with Leoti Red Sorghum. The result is a hardy variety with heavy, wide leaves and a sweet juicy stalk. It is resistant to drought and foliage diseases. Live stock feeders prefer it to standard Sudan. Give it a try.

TALL OR ALTA FESCUE. Somewhat coarser than Meadow Fescue and more drought resistant, more productive and more alkali tolerant.

TALL MEADOW OAT GRASS. A tall, long-lived, deep-rooted perennial that is winter hardy. Height 3 to 5 feet. Requires well-drained, light soils, with medium moisture. Used for hay and pasture.

TIMOTHY (*Phleum Pratense*.) Well adapted to spring and summer grazing, greatly relished by all kinds of stock, especially horses. Excellent hay crop. Sow 10 to 12 pounds to the acre.

TIMOTHY AND ALSIKE (Mixed). Used extensively in the mountain area. We can supply mixtures containing 10 per cent, 20 per cent, 30 per cent, and 40 per cent Alsike.

WEeping LOVE GRASS. A high producing grass from South Africa that supports more cattle per acre than most grasses, but not so much gain per head. Not very palatable and not long-lived.

WESTERN WHEAT GRASS (*Agropyrum Smithii*.) Grows taller than Crested Wheat Grass and produces more hay per acre, but does not provide as much pasturage. A good drought resister and perennial.

TALL WHEAT GRASS. A tall perennial bunch grass. Shows great promise for hay and pastures under wet, seepy, alkaline conditions, high altitude areas, and more limited use in semi-arid areas. Starts growth in early spring and continues late into summer. Greens up in fall after short dormant period. Very nutritious. Use as a hay or pasture grass in alkaline or wet areas where other grasses do not produce; in connection with other pastures to extend grazing season because of late maturity; in mixture in low wet ends of waterways; or in low areas subject to flooding or standing water. Plant 8 to 10 pounds per acre.

BUFFALO GRASS. A long-lived perennial which spreads by runners. Highly drought resistant. For pastures use 3 pounds per acre mixed with 6 pounds of Grama. For dry land lawns plant one pound to 400 sq. ft. Treated seed hastens germination.



THERE IS NOTHING THAT ADDS SO MUCH TO THE BEAUTY AND THE VALUE OF YOUR HOME AS DOES A NICE LAWN

Modern fertilizers, chemical weed killers, watering devices have all made lawn maintenance comparatively simple.

BUT it is of utmost importance to do a thorough job in making a new lawn.

NEW LAWN

1. Condition the soil. If it is too sandy, add sufficient peat moss or weed-free manure (if you can get it); if too heavy, use Krilium or some other soil conditioner, peat moss, manure, Vermiculite or coarse sand.

2. Spade or plow to a depth of 4 to 6 inches and pulverize thoroughly. Grass seeds are very, very small; need a finely pulverized seed base.

3. Apply a good commercial fertilizer at a liberal rate. Apply it evenly and work it into the top 2 or 3 inches with a rake. Water thoroughly and wait a day or two before seeding.

Sow good grass seed at the rate of six to eight pounds per 1,000 square feet. Rake the seed in lightly.

5. Roll or tamp to imbed seed and insure perfect contact between seed and soil. A tamper or wide board can be used on small areas if a roller is not available.

6. Cover entire area with peat moss about 1/4-inch deep. One large bale will cover about 1,200 square feet. This holds moisture in the soil and prevents baking.

7. Water thoroughly, using a fine spray. Keep the ground moist but not sopping wet. Water once or twice each day for three or four weeks, then water as needed but always water thoroughly.

OLD LAWN

Does your old lawn need rejuvenation? Lawn grasses need food, water and air. Fertilizers and water will take care of the first two needs but the supplying of air is generally neglected.

Tramping and rolling packs the soil so that it will not properly take water and does not get air. The application of sand and peat moss is often beneficial but this does not get down to the roots.

Aerating with an Aerifier is the answer. The Aerifier is a tool that takes out a 4-inch plug about as large as your finger. While these plugs are lying on the ground, scatter some Vermiculite or peat moss, together with some fertilizer and a little grass seed, on the plot. Then drag a door mat over the plot so that this material will fall into the holes. Take a small space at a time and when you have gone over the entire lawn you will have the kind of a lawn that you dream about.

DENVER FANCY MIXED LAWN GRASS. A moderately priced mixture made up of Kentucky Blue Grass, Chewings Fescue, Annual Rye and White Clover.

The Rye in this mixture comes up quickly, acts as a nurse crop for the Blue Grass and is gradually taken over and eliminated by the other grasses and clover. This mixture is the easiest to grow. Sow one pound to 100 square feet for a quick turf, or one pound to 150 to 200 square feet for slower results.

COLUMBINE MIXED LAWN GRASS. Our Columbine Mixed makes a beautiful lawn. It consists of heavy weight Kentucky Blue Grass, Chewings Fescue, and Astoria Bent Grass. This makes a thick turf of good color. It greens up early in the spring, and will stand a good amount of tramping. It is as good a mixture as is on the market, and is reasonably priced. You plant one pound to 100 to 150 square feet.

KENTUCKY BLUE GRASS. Always reliable. The standard grass seed in America for lawns and pastures. One pound should be sown for every 150 square feet, or for every plot 10-15 feet. Sow 30 pounds to the acre for pasture.

MERION KENTUCKY BLUE GRASS—Merion Blue seems to be as good as the turf authorities say it is. It has a dark green color, grows thicker than Kentucky Blue, takes less water, is less subject to disease, keeps out Crab Grass better. Sow 2 to 4 pounds to 1,000 square feet.

SEASIDE BENT GRASS (Creeping)—Widely used on putting greens on golf courses. Takes extra care for best results—closer and more frequent mowings, more fertilization, and more water. Very fine bladed. Keeps out weeds as it makes a thick turf. Sow one pound to 200 square feet for new lawns.

ASTORIA and HIGHLAND BENT. Quite similar. Highland is grown at a higher altitude and under dryer conditions. Makes a thick turf and stays mixed with other grasses whereas Seaside will cross out other grasses. Either Highland or Astoria are excellent for thickening up an old lawn. Sow one pound to 200 square feet on new lawns, and one pound to 400 square feet on old lawns.

CHEWING FESCUE. Round bladed, fine grass, that does well in shade, especially in dry places. Stands a lot of tramping.

RED CREEPING FESCUE. Similar to Chewing but spreads more.

PARK KENTUCKY BLUE GRASS. Claimed to be a little faster germination than Merion or Common Kentucky Blue Grass.

NEWPORT, or ALTRA C1 KENTUCKY BLUE GRASS. Greens up earlier in spring, stays green longer in the fall and is darker green than common Kentucky Blue Grass. Rust resistant, vigorous root system, dense uniform turf.

TROY TURF. Kentucky Blue or Merion Blue imbedded in sterilized, fertilized jute blanket. Roll it on prepared soil surface, water and roll. Grass grows, blanket disintegrates. In rolls 54" wide by 90 ft. long. Easy to grow grass on steep slopes. Heavy rains can't wash it out.

62

Barteldes Seed Company
Lawrence, Kansas

NATIONAL AGRICULTURAL LIBRARY
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VEGETABLE SEED PRICES

U. S. DEPARTMENT OF AGRICULTURE

Prices on Beans, Peas and Sweet Corn are postage extra. All others are postpaid.

The Barteldes Seed Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container, within recognized tolerances. Seller gives no other or further warranty, express or implied.

		1 oz.	¼ lb.	1 lb.
ASPARAGUS		\$.20	\$.60	\$2.25
BEANS	½ lb.	1 lb.	5 lbs.	10 lbs.
Commodore, Wade, Logan, Brittle Wax Top Crop	\$.35	\$.65	\$.63	\$.60
Stringless Black Valentine, Burpee's Stringless Green Pod, Henderson's Bush Li- ma, Jackson Wonder Lima	.30	.55	.50	.45
All Others	.35	.65	.60	.55
	½ oz.	1 oz.	¼ lb.	1 lb.
BEET		.25	.60	2.00
BORECOLE or KALE		.20	.60	2.00
BROCCOLI	.25	.35	1.00	3.50
BRUSSELS SPROUTS	.25	.40	1.30	4.75
CABBAGE				
Jersey Queen, Wisconsin	.30	.50	1.60	5.80
Ball Head, Red Acre, Other Varieties	.25	.40	1.35	4.80
CARROTS		.35	.90	2.75
CAULIFLOWER	1.00	1.80		
CELERY	.40	.75	2.50	8.00
COLLARDS		.25	.60	2.00
CUCUMBERS				
Hybrid	2.50	4.50		
Early Fortune and National Pickling, Early Cluster		.30	.90	2.85
All others		.35	1.20	3.00
EGGPLANT	.40	.70	2.40	8.00
ENDIVE		.30	.90	3.00
KOHL-RABI		.40	1.25	4.80
LEEK	.40	.70	2.50	8.00
LETTUCE				
Black Seeded Simpson, White Seeded Simpson, Big Boston, Prizehead, Grand Rapids		.30	.85	2.90
Hanson's Iceberg, May King, Oak Leaf		.35	.95	3.40
Imperial No. 847, New York, New York No. 12	.25	.40	1.25	4.00
Great Lakes	.35	.50	1.25	4.00
Salad Bowl	.35	.50	1.35	5.00
MUSKMELON		.25	.70	2.40
MUSTARD		.20	.45	1.00
ONIONS				
Sweet Spanish	.35	.60	2.00	6.50
White Lisbon	.30	.50	1.75	6.00
White Sweet Spanish	.35	.60	2.00	6.50
Yellow Globe Danvers	.25	.40	1.25	4.00
Mountain Danvers	.25	.40	1.25	4.00
Southport Red Globe	.30	.50	1.35	6.00
Large Red Wethersfield	.30	.50	1.35	6.00
White Silverskin	.35	.60	2.00	6.50
Southport White Globe	.35	.60	2.00	6.50
Yellow Ebenezer	.30	.50	1.75	6.00
White Ebenezer	.35	.60	2.00	6.50
White Bermuda	.30	.50	1.75	6.00
Crystal White Wax	.30	.50	1.75	6.00

	1/2 oz.	1 oz.	1/4 lb.	1 lb.
OKRA		.20	.50	1.50
PARSLEY		.30	1.00	3.00
PARSNIP		.20	.50	1.50
PEAS	1/2 lb.	1 lb.	5 lbs.	10 lbs.
Alaska	.25	.40	.38	.35
All Others	.30	.50	.48	.45
PEPPER	1/2 oz.	1 oz.	1/4 lb.	1 lb.
	.40	.70	2.40	8.00
PUMPKIN				
All varieties		.30	.70	2.20
RADISH		.30	.60	1.60
RHUBARB		.40	1.20	4.00
SALSIFY	.25	.60	1.50	5.50
SPINACH				
All varieties		.20	.35	.85
SWEET CORN				
OPEN POLLINATED	1/2 lb.	1 lb.	5 lbs.	10 lbs.
Country Gentleman	.25	.40	.37	.36
Extra Early Adams, Truck- er's Favorite	.25	.40	.36	.35
Golden Bantam, Stowell's Evergreen	.25	.40	.37	.36
HYBRIDS				
Golden Cross Bantam, Ioana, Trucker's Favorite	.40	.60	.58	.55
Marcross, Iochief, Tender- gold, Evergreen	.40	.65	.63	.60
Hybrid Country Gentleman	.45	.70	.68	.65
Early Sunglow	.45	.75	.73	.70
SQUASH	1/2 oz.	1 oz.	1/4 lb.	1 lb.
		.20	.60	2.00
TOMATO				
Stokes Cross F2 No. 5		5.00		
Bison	.40	.70	2.50	9.00
Chalk's Early Jewel	.35	.60	2.00	7.00
Earliana	.40	.70	2.50	9.00
Fireball	.50	.80	2.75	
Firesteel	.40	.70	2.50	9.00
Glamour	.60	1.10	4.00	
Greater Baltimore	.30	.50	1.75	6.00
Grothen's Globe	.35	.60	2.00	7.00
Homestead	.60	1.00	3.75	
Marglobe	.40	.70	2.50	9.00
Marglobe Certified	.50	.80	2.75	10.00
Ponderosa	.50	.80	2.75	10.00
Pritchard	.40	.70	2.50	9.00
Pritchard Certified	.50	.80	2.75	10.00
Rutgers	.35	.60	2.00	7.00
Rutgers Certified	.40	.70	2.50	9.00
Stone	.35	.60	2.00	7.00
Golden Ponderosa	.50	.80	2.75	10.00
Yellow Pear	.50	.80	2.25	10.00
Wonder Boy Hybrid—Pkt. .40 Big Boy Hybrid—Pkt. .50				

TURNIP		.20	.35	.80
WATERMELON				
New Hampshire Midget	.20	.30	1.00	3.25
Florida Giant Certified	.20	.30	1.00	3.25
Dixie Queen, Florida Giant, Irish Gray		.30	1.00	3.25
Other Varieties		.25	.80	2.75

JANUARY 1, 1963

NEW ANNUAL FLOWERS

*Be the First
to Grow Them*

NEW PETUNIAS

BLUE LUSTRE. The opening flowers are deep, velvety petunia-blue, later developing a rich red undertone. About 1 foot tall. Pkt. 40c.

PEACH SATIN. Soft salmon-pink. Dwarf, dense growth. Pkt. 40c.

MAYTIME. All-America Winner. Light pink hybrid, new for 1958. Compact, 12-inch plant. Very free flowering, even through heat and rain. Pkt. 40c.



PETUNIA, MAYTIME



ZINNIA

Pride of Dieldrin

The 4 to 5-inch blooms have twisted and pointed petals. Flowers golden orange in the outer portion, deepening to the most vivid imaginable scarlet-flame at the center. A most striking color combination. Pkt. 35c.



MARIGOLD, CRACKERJACK

MARIGOLD, Crackerjack

A wonderful new Marigold. Flowers are uniformly double and measure from 3 to 5 inches across, in a full range of primrose-yellow, gold and orange. Plants are compact and sturdy and hold their flowers well above the foliage. Don't miss this one. It is really a Crackerjack. Pkt. 25c.

ASTER

Powderpuffs

The 2-foot plants literally covered with refined, tightly double flowers in many, many colors. Early blooming, starting in August, and wilt resistant. Long stems, fine for cutting. Pkt. 25c.

ALYSSUM

Royal Carpet

All-America Winner

These compact, spreading plants are only 3 inches tall but spread to 12 inches and are so covered with rich violet-colored flowers that no foliage shows. A perfect edging and ground-cover plant, blooming over a long season. Pkt. 25c.



ALYSSUM, ROYAL CARPET



ASTER, POWDERPUFFS

Since 1867
**The BARTELDES
SEED CO.**

LAWRENCE, KANS.
DENVER, COLO.

SOLD BY

BUY YOUR BARTELDES SEEDS AND YOUR GARDEN SUPPLIES FROM YOUR FRIENDLY LOCAL DEALER

This home town dealer is your friend and neighbor. He carries adequate stocks for your convenience and can help you with your gardening problems.

Should you want some varieties or some items that he does not have in stock he will be glad to get them for you.

CONSULT HIM AND BUY YOUR BARTELDES SEEDS FROM HIM



WONDER BOY F 1 HYBRID TOMATO

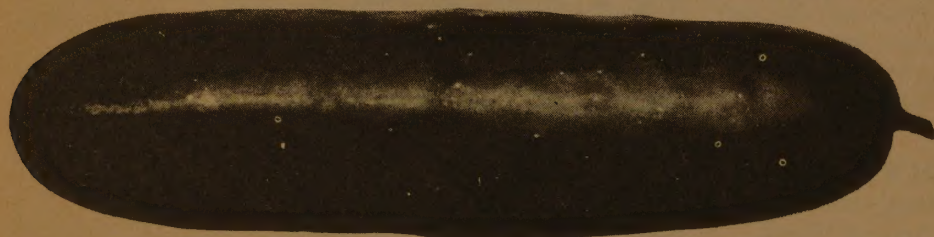
An extra large, round, mid-season hybrid tomato of wonderful flavor. The tomatoes are extra large weighing one pound or more, very firm and meaty. A very heavy yielder. In our garden it far out-yielded another popular hybrid. Try it, you'll be delighted.

Pkt. of 30 seeds 40c

SEMINOLE WATERMELON

We offer this new melon for the first time. A superior melon with very sweet, bright red flesh. Every one who tried it pronounced it to be of delicious flavor. Melons are oval, dark green and weigh about 25 lbs.

Pkt. 15c



HYBRID CUCUMBER

A heavy yielder of fine large Cucumbers. Pkt. 30c

A new early hybrid of superior quality which we recommend most highly both for market and home garden.

Stalks are about 4½ feet tall and very vigorous even under cold conditions.

Ears are attractive, well filled, about 7 inches long, mostly slightly tapering and generally 12 rows. Kernels medium yellow, excellent flavor, unsurpassed in tenderness and holds at edible stage for a long time. Mature in 66 days.

Pkt. 25c

EARLY SUNGLOW

Early Hybrid Sweet Corn

